Computational Data Analysis
Credits: 10

- Activity 1: Know your Trait
- Activity 2: Journey of Python
- Activity 3: Construction of Matrix
- Activity 4: Graph and Matrices (Representation of travel cost between residences of student and calculations based on it)
- Activity 5: Encoding and Decoding of Text
- Activity 6: SDG Tournament

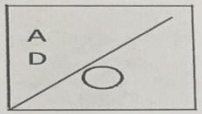
SHIVI SHARMA
2018BTECHCSE002.

WADHWANI FOUNDATION

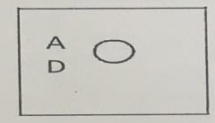
ASSESS THE RESULTS

CALCULATING YOUR SCORE

Starting with box 1 in the top right hand corner of your answer sheet and, working across the sheet to the left, give yourself one point for every D that you have circled in the shaded boxes on that line like this:



Similarly give yourself one point for every A that you have circled in the unshaded boxes on that line like this:



Now add up your total score in the top row and write it in the margin.

Do the same for the remaining eight rows scoring in the same manner as above.

When you have finished transfer your scores for each row to the boxes below.

Row 1 ... 4	Row 2 ... 3	Row 3 ... 3
Row 4 ... 2	Row 5 ... 3	Row 6 ... 3
Row 7 ... 3	Row 8 ... 4	Row 9 ... 3

Add your scores in rows 1 and 6 for Section 1	7
Row 3 alone will give you a score for Section 2	3
Add your scores in rows 5 and 8 for Section 3	7
Add your scores in rows 2 and 9 for Section 4	6
Add your scores in rows 4 and 7 for Section 5	5

Each section assesses particular attributes. A high score in any category means that you have many of the qualities which that particular section has been measuring. The sections are as follows:

WADHWANI FOUNDATION

46 A D 1	37 A D 1	28 A D	19 A D 1	10 A D	1 A D 1
47 A D 1	38 A D	29 A D	20 A D 1	11 A D	2 A D 1
48 A D 1	39 A D	30 A D	21 A D 1	12 A D 1	3 A D
49 A D	40 A D	31 A D	22 A D	13 A D 1	4 A D 1
50 A D 1	41 A D 1	32 A D	23 A D 1	14 A D	5 A D
51 A D	42 A D	33 A D	24 A D 1	15 A D 1	6 A D 1
52 A D 1	43 A D	34 A D	25 A D	16 A D 1	7 A D 1
53 A D 1	44 A D 1	35 A D 1	26 A D	17 A D	8 A D 1
54 A D 1	45 A D 1	36 A D	27 A D	18 A D 1	9 A D

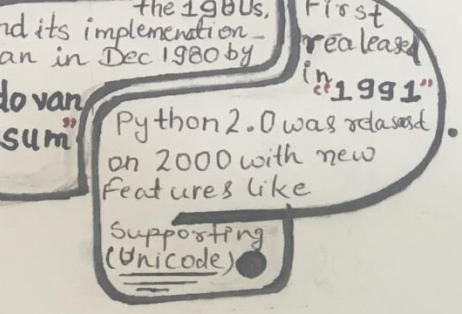
4 3 3 2 3 3 3 4 3

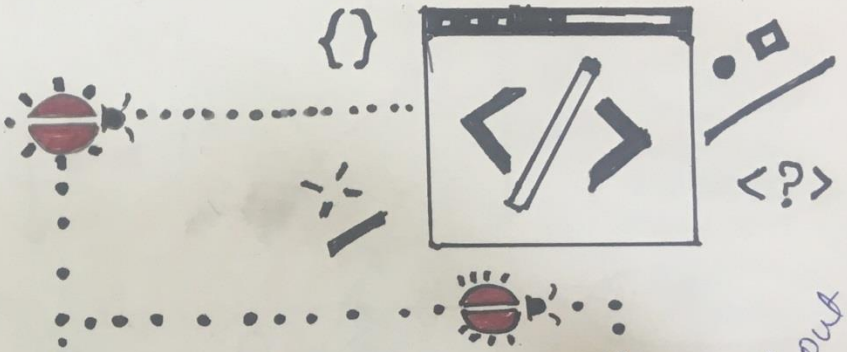
- Activity 1: Know your Trait
- Activity 2: Journey of Python
- Activity 3: Construction of Matrix
- Activity 4: Graph and Matrices (Representation of travel cost between residences of student and calculations based on it)
- Activity 5: Encoding and Decoding of Text
- Activity 6: SDG Tournament

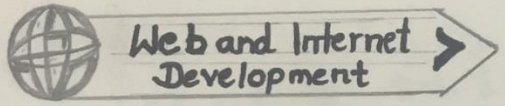
PYTHON

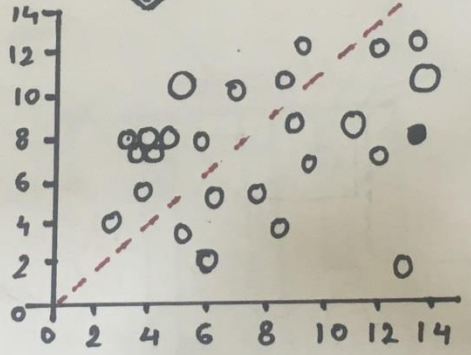
[Mayank Soni
2018BtechCSE007]

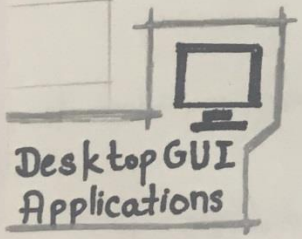
- Python was conceived in the 1980s, and its implementation began in Dec 1980 by "Guido van Rossum"
- First released in "1991"
- Python 2.0 was released on 2000 with new features like Supporting (Unicode)

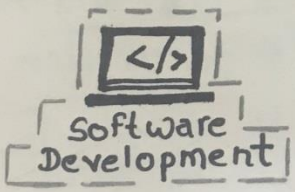


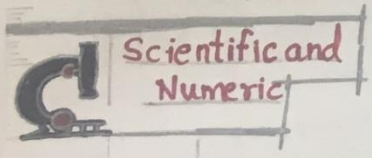


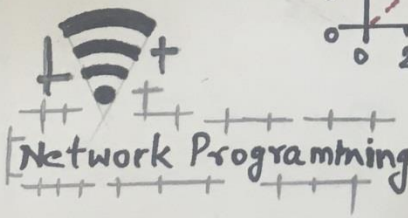


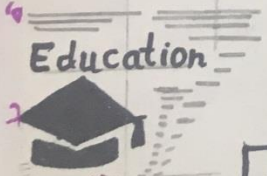


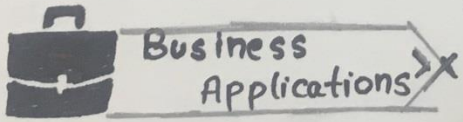


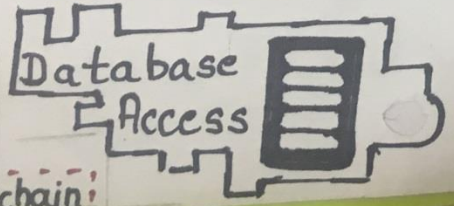


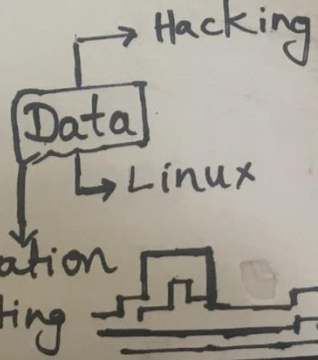












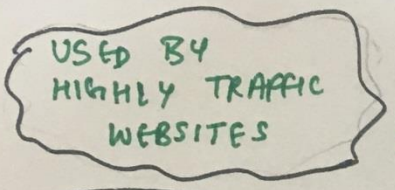
Without Group

PYTHON

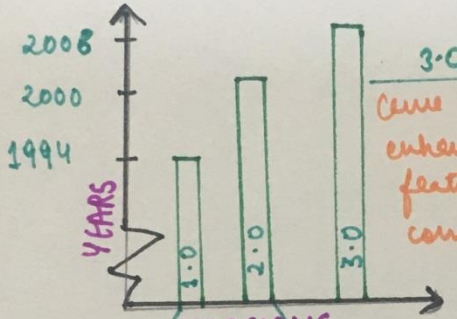
Most popular coding language of 2015.

EVOLUTION OF PYTHON

:) → ¯_(ツ)_/¯ →



- GOOGLE
- YAHOO GROUPS
- YAHOO MAPS
- SHOPZILLA
- LINUX



3.0 came up with enhancement of features, compatibility

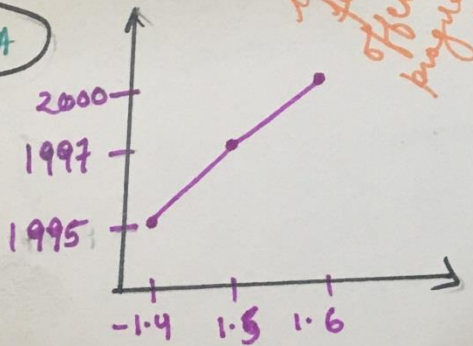
programmers cannot access features like string exceptions, old style classes, implicit relative imports.

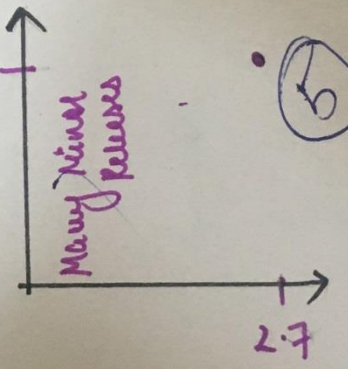
LATEST VERSION → 3.4.3 & 2.7.10

Version 4.0 Expected release 2023.

1.0 Introduced some features, loved by popul. programming language

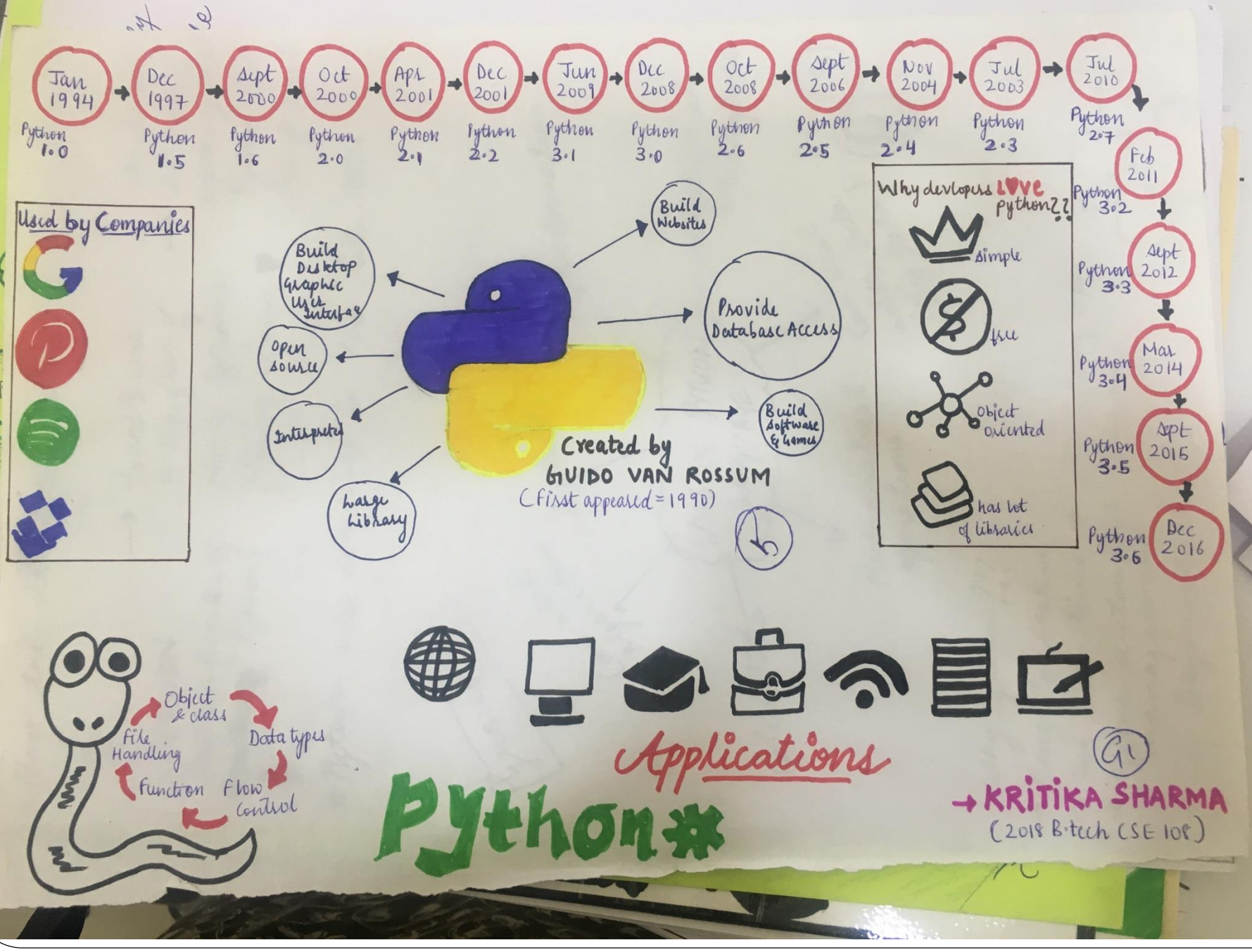
2.0





(b)

(a) By-> Aditya Jain
2018 BTech ME002


Jan 1994 Python 1.0
Dec 1997 Python 1.5
Sept 2000 Python 1.6
Oct 2000 Python 2.0
Apr 2001 Python 2.1
Dec 2001 Python 2.2
Jun 2009 Python 3.1
Dec 2008 Python 3.0
Oct 2008 Python 2.6
Sept 2006 Python 2.5
Nov 2004 Python 2.4
Jul 2003 Python 2.3
Jul 2010 Python 2.7
Feb 2011 Python 3.2
Sept 2012 Python 3.3
Mar 2014 Python 3.4
Sept 2015 Python 3.5
Dec 2016 Python 3.6
Used by Companies
Build Desktop Graphic User Interface
Build Websites
Provide Database Access
Open source
Interpreted
Large Library
Build Software & Games
Created by GUIDO VAN ROSSUM
(First appeared = 1990)
Why developers LOVE Python??
simple
free
object oriented
has lot of libraries
Object & class
Data types
Flow Control
Function
File Handling
Applications
Python
KRITIKA SHARMA
(2018 B.tech CSE 108)

GROUP = 2

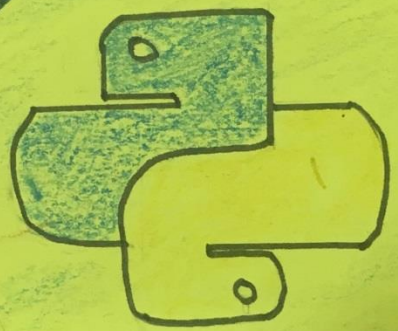
JOURNEY OF PYTHON

5

PYTHON development is conducted by the Python Enhancement Proposal (PEP)

IMPLEMENTATION

- command line interpreter
- IDLE
- PYTHON



- High level Programming
- Released in 1991
- Designed By Guido Van Rossum
- Developer Python Software Foundation
- First appeared 1990
- PYTHON 2.0 Released in 2000
- PYTHON 3.0 Released in 2008

PYTHON

USES OF PYTHON

1. Web & Internet development
2. App of python programming in Desktop GUI
3. Scientific & Numerical Application
4. Software Development
5. In Business, Education. Networking, Data Acces. Games etc.
6. Artificial Intelligence.

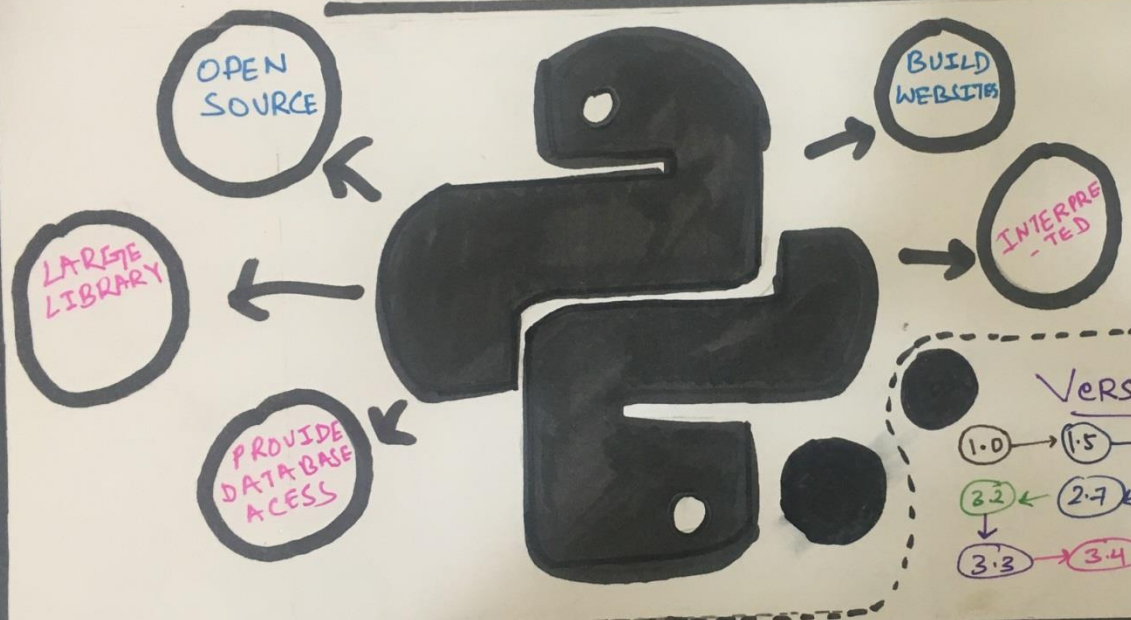
HISTORY

1) PYTHON conceived in the late 1980s by Guido Van Rossum at Centrum Wiskunde & Informatica
2) Python 2.7's end-of-life date was initially set at 2015 and postponed to 2020.
3) In 2017 Google announced to work on Python 2.7 to GO transcompiler

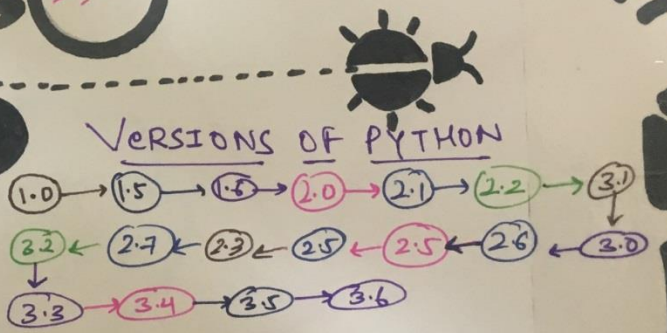
```
<<< print ("")
```

Aayush Sharma
2018 Btech CSE 101

PYTHON



(Group 3

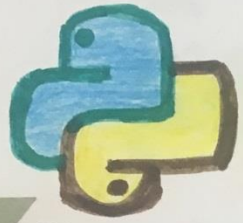


Python was Conceived in the late 1980s by Guido Van Rossum at CWI. in netherlands as a successor to ABC language capable of Exception handling & interfacing with the Amoeba of operating system. Its implementation began in December 1989, Python is an interpreted high level programming language for general purpose programming. It has a design philosophy that emphasize code readibility.

KUNAL SHARMA
2018-BTECH-CSE-109

USES:

- scripting language for web application
- GNU debugger uses it as pretty-printer
- Algorithmic Trading
- Quantitative Finance
- Used in Artificial Intelligence
- Used in Information Security Industry
- Used for Natural language processing.



python™

(Group 3)

Philosophy: emphasizes code, notably using significant white space & readability.

History

A successor to ABC language.
Python 0.9.0 → 20-02-1991; Python 1.0 → Jan 1994; Python 2.0 → 16/0/2000 (cycle detecting garbage collector & support for unicode); Python 2.7 → Jan 2017 (to go transcompiler to improve performance); Python 3.0 → 3/2/2018; Current → Python 3.7

Why Python??

- Easy to learn.
- Simple.
- Clean syntax.
- As readable as English.
- Write less code.
- Higher productivity.

3 to 5 times shorter than JAVA.

5 to 10 times shorter than C++.

Unlike other code, it doesn't use curly braces & semicolon are optional.

Created by: Guido Van Rossum.
Released in: 1991
Typing discipline: duck, dynamic, strong
Filename extns.: .py, .pyc, .pyd, .pyo (prior to 3.5 version)
.pyw, .pyz (since 3.5)
developer: Python Software Foundation
License: Python Software Foundation License
Website: www.python.org
Paradigm: object oriented, imperative, functional, reflexive, procedural.

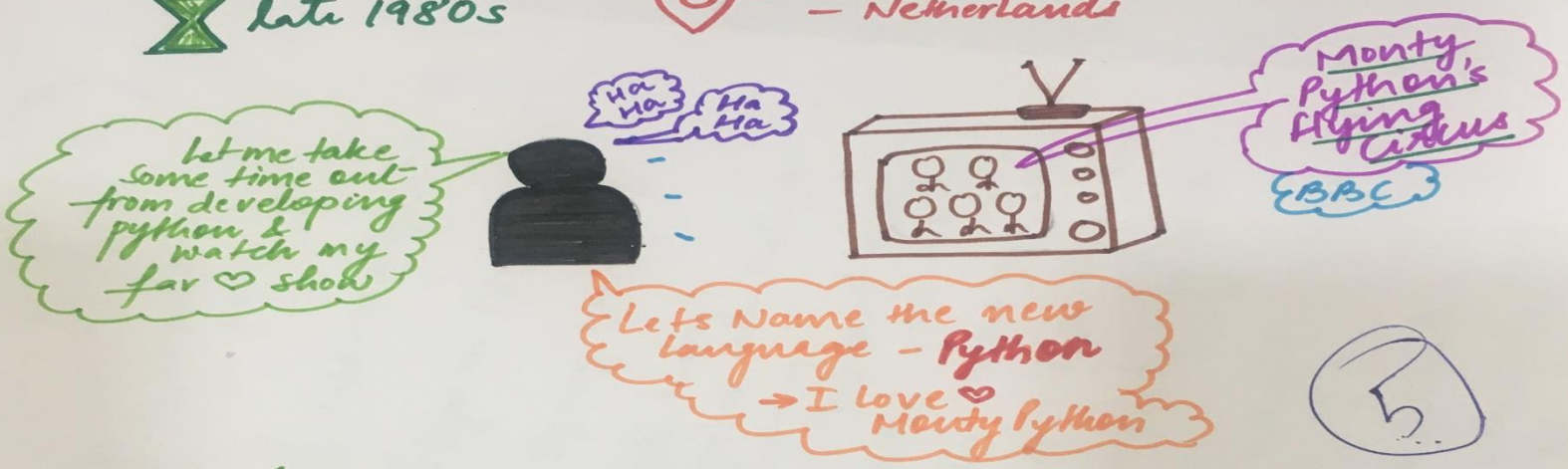
-SHIVI SHARMA
(2018BTechCSE118)

Python

GUIDO VAN ROSSUM's Creation

Late 1980s

Centrum Wiskunde & Informatica — Netherlands



PYTHON 1.0
Late 1980s

PYTHON 2.0
October 16, 2000

PYTHON 3.0
December 03, 2008

VANSHIKA SHARMA
2018BTechCSE120

Evolution Of Python

2018 BTech CSE 116
Sanket Sharma

CREATED BY
Guido Van Rossum

Developed In
Early 1990s

18 versions Released
Since Jan 1994

Major Implementations
CPython, IronPython
Jython, MicroPython
Numba, PyPy.

Dialects
Cython, RPython

It is a multi-paradigm programming language.
Object oriented programming are fully supported.

Implemented In 1989

Released In 1991

Ver. 3.0 3 Dec. 2008
major revision of language that is not completely backward comp.

Ver 2.0
16th Oct 2000
Upd = new feat. inc. Cycle detecting Garbage Collector

The Python We Have Today

But Why This Name?

When Guido Van Rossum began implementing Python he was also reading published scripts from "Monty Python's Flying Circus".
He needed a short, unique name for language, so he called it Python.

By Varun Rawat Roll

Sanyukta Tanwar
2018 Btech CSE 117
Group - 10

PYTHON

HISTORY

→ Created by Guido van Rossum in 1991
→ Named after famous group 'monty Python'.

FOCUS

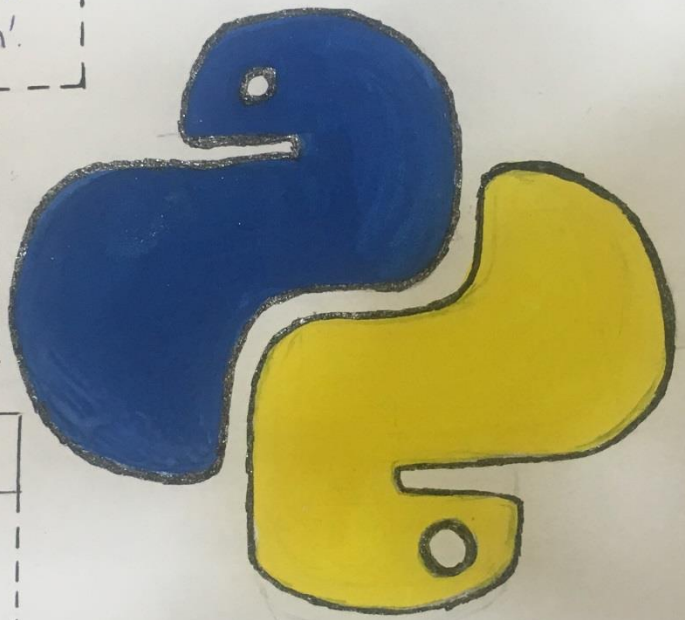
It focus on productivity and code readability

EASE OF USE

Coding and debugging is easier in Python

EASE OF LEARNING

Phython's learning curve is relatively low and gradual



TYPING

Python use dynamic typing allowing user to change the variable type and make more easier for them.

EXTENSIBILITY

It can be embeded in many languages like C & C++. It can work with Java as Jython

POWERFULL

It support necessary hooks, extension and func^n to allow low level access of operating system. It is high level programming lang.

PRODUCTIVITY

Write code in fewer lines allowing developer to be more productive

AVINDHYA SHANDILYA.

2018 BTech CSE 105

PYTHON

Q. 12

(3)

Python is an interpreted, high level programming language for general-purpose programming. Created by Guido van Rossum and first released in 1991. It supports multiple programming paradigms, including object-oriented.

Implementation started - 1989
Internal Release - 1990
Python 0.9.0 - Feb 20, 1991
Python 0.9.1 - Feb, 1991
Python 0.9.2 - Aut, 1991
Python 0.9.4 - Dec, 1991
Python 0.9.5 - Jan, 1992
Python 0.9.6 - April, 1992
Python 0.9.8 - Jan, 1993
Python 0.9.9 - July, 1993
Python 1.0 - January 1994
Python 1.2 - April, 1995
Python 1.3 - Oct, 1995
Python 1.4 - Oct, 1996
Python 1.5 - Dec, 1997
Python 1.6 - Sep, 2000

(12)

Python 2.0 was released on 16th Oct 2000 with many major new features including a cycle-detecting garbage collector.

Python 3.0 was released on 3 Dec-2008. It was a major revision of the language that is not completely backward compatible.

Python 2.7's end-of-life date was initially set at 2015 then postponed to 2020 out of concern that a large body of code exists.

Python Timeline

Evolution of Python

Developed in early 1990's

Guido Van Rossum created it

Based on ABC Programming language

18 version of Python released Since Jan 1994

Its development is looked over by Python Software foundation.

Major Implementation

Cpython, Ironpython, Jython, Micropython

Influenced by

ABC, ALGOL, APL, C++, Java, Perl

Influened

Boo, Cobra, D, F#, Genie, Ruby

becoming the most popular coding language

open source language and moved to Github in 2017

By- Varun Rawat Roll No.- 2018 Btech CSE018

Evolution of Python

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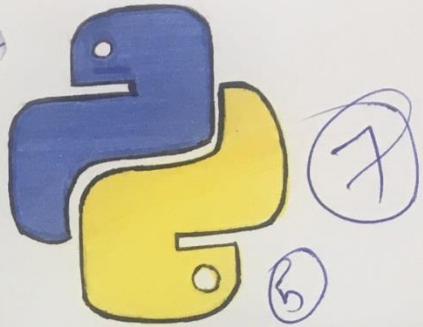
By- Varun Rawat Roll No.- 2018 Btech CSE018

Python



FEATURES

- simple and powerful language.
- single statement operations
- No varibles and argument declaration
- Free and open source (FLOSS)
- Object-oriented (Building around object which combine data & funtionality)
- High level language
- Portable (change to make it work)
- Interpreted.

Created by Guido Van Rossum in 1990

Named after BBC show "Monty Python's Flying Circus"

Python is an interpreted, interactive, object-oriented and high level programming language.

Create solution to complex issues in short time and less lines of codes than many other languages (C, C++, Java)

USE OF PYTHON

- Web and internet development
- Scientific and Numeric
- Education
- Desktop GUIs
- Software development
- Business Applications
- Security Purposes
- Machine learning.

2018BTechCSE122
Nikita Khoj
Group:-7

- Activity 1: Know your Trait
- Activity 2: Journey of Python
- Activity 3: Construction of Matrix
- Activity 4: Graph and Matrices (Representation of travel cost between residences of student and calculations based on it)
- Activity 5: Encoding and Decoding of Text
- Activity 6: SDG Tournament

- Activity 1: Know your Trait
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- Activity 5: Encoding and Decoding of Text
- Activity 6: SDG Tournament

- Activity 1: Know your Trait
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- Activity 5: Encoding and Decoding of Text
- Activity 6: SDG Tournament, Python Notebook

Project of Module 1 (Computational Linear Algebra)

Project: SDG Tournament

- Description: Team Ranking based on performance in SDG tournament
- Within each Group Tournament would be played and Solution to Rank the Team would be build by Students.

Learning Outcome (Project of Module 1)

- Write Simple Python programs using Various Datatypes, Control Structures, Decision Statements, Libraries, Functions (M1)
- Model Complex systems as Linear simultaneous equations and analyze the same using Matrix methods (M1)
- Model Data as matrices and Find Eigen Values and Eigen Vectors and Apply the same for problem solving, e.g., ranking and performance analysis (M1)

Evaluation

- Journey of Python
- Flowchart (Submitted in File)
- Algorithm (Prime Number, Discussion in class)
- Quiz
- Activity 4 (Based on Numpy and matrix operations)
- Assignment 1 (Linear Algebra)
- Assignment 2 (Python Program)
- Theory Exam (Linear Algebra)

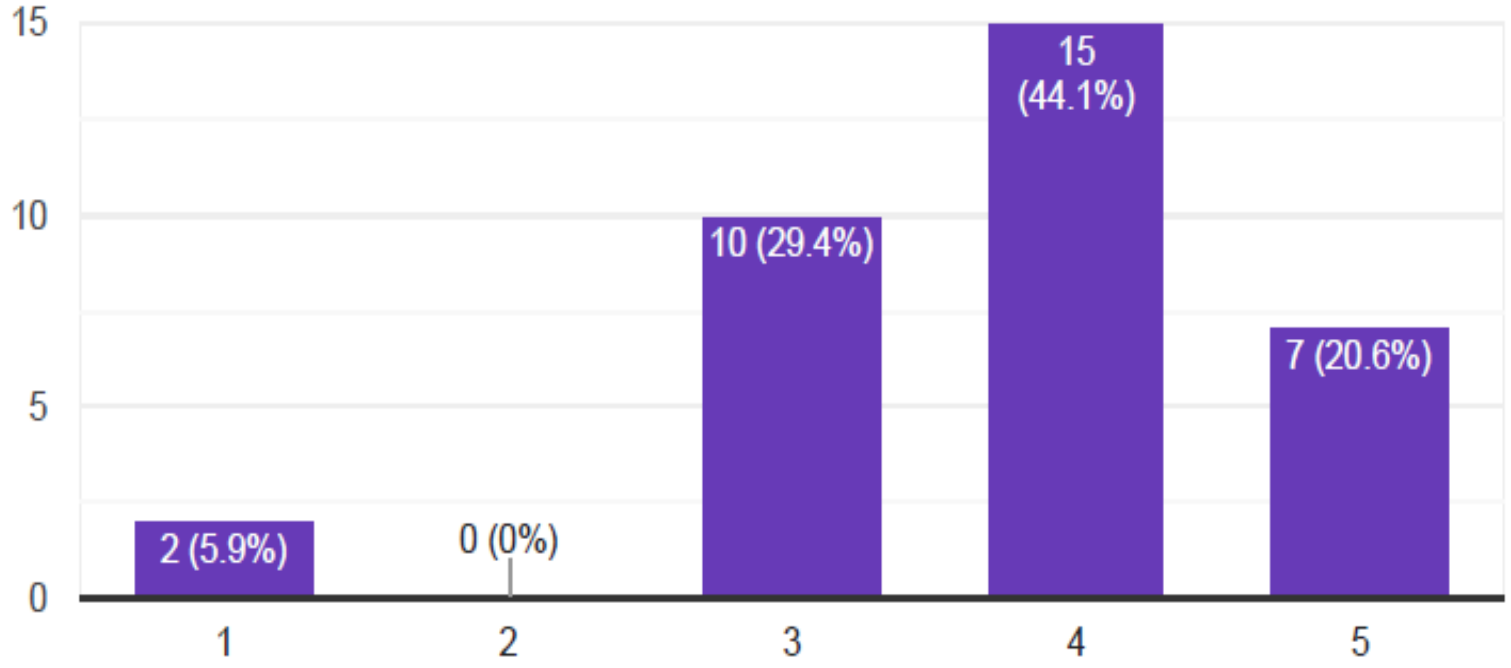
Evaluation Score

Component	Average	Standard Deviation
Journey of Python (5)	2.93	1.73
Presentation (Journey of Python) - 5	3.3	1.72
Flowchart (Submitted in File) - 5	3	2.17
Algorithm Prime Number - 5	2.5	2.39
Quiz - 10	2.84	1.65
Asignment 1 (LA) - 10	7.24	1.51
Assignment 2 (Python Program) - 20	12.13	7.28

Feedback

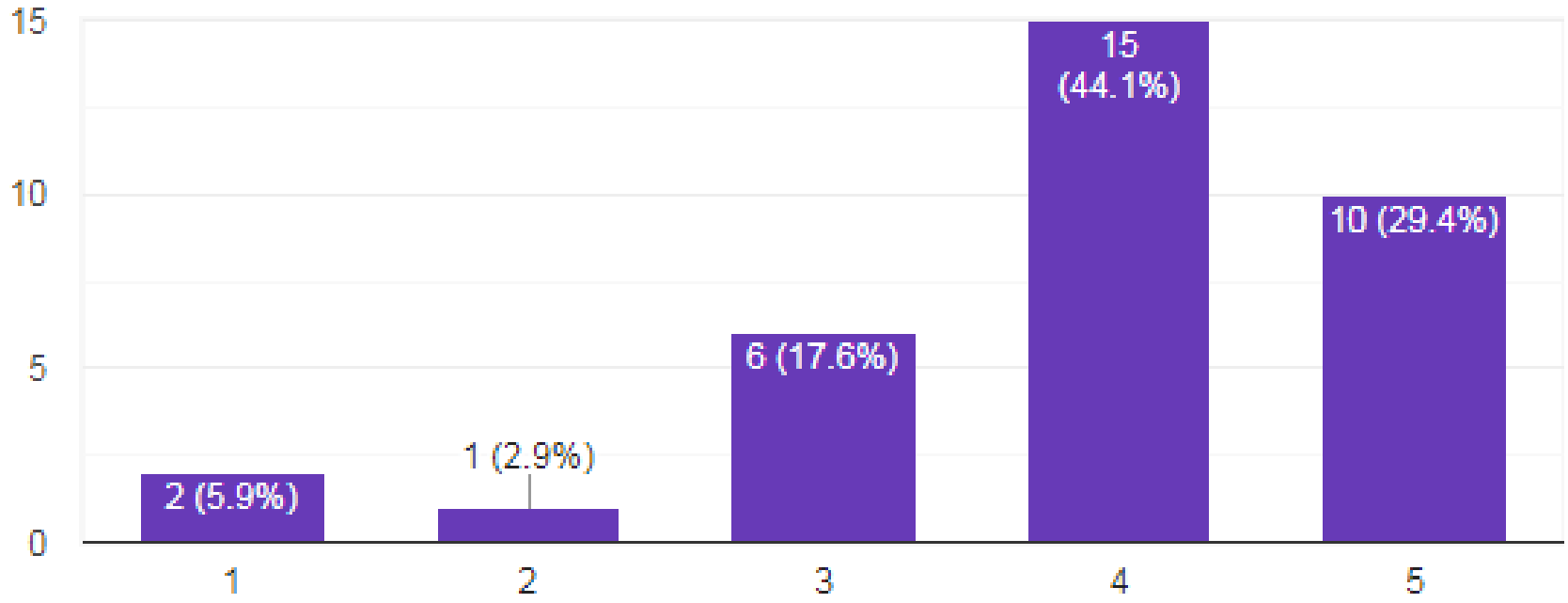
1. How well was the content delivery paced as per your (student) understanding? (Scale of 1 to 5)

34 responses



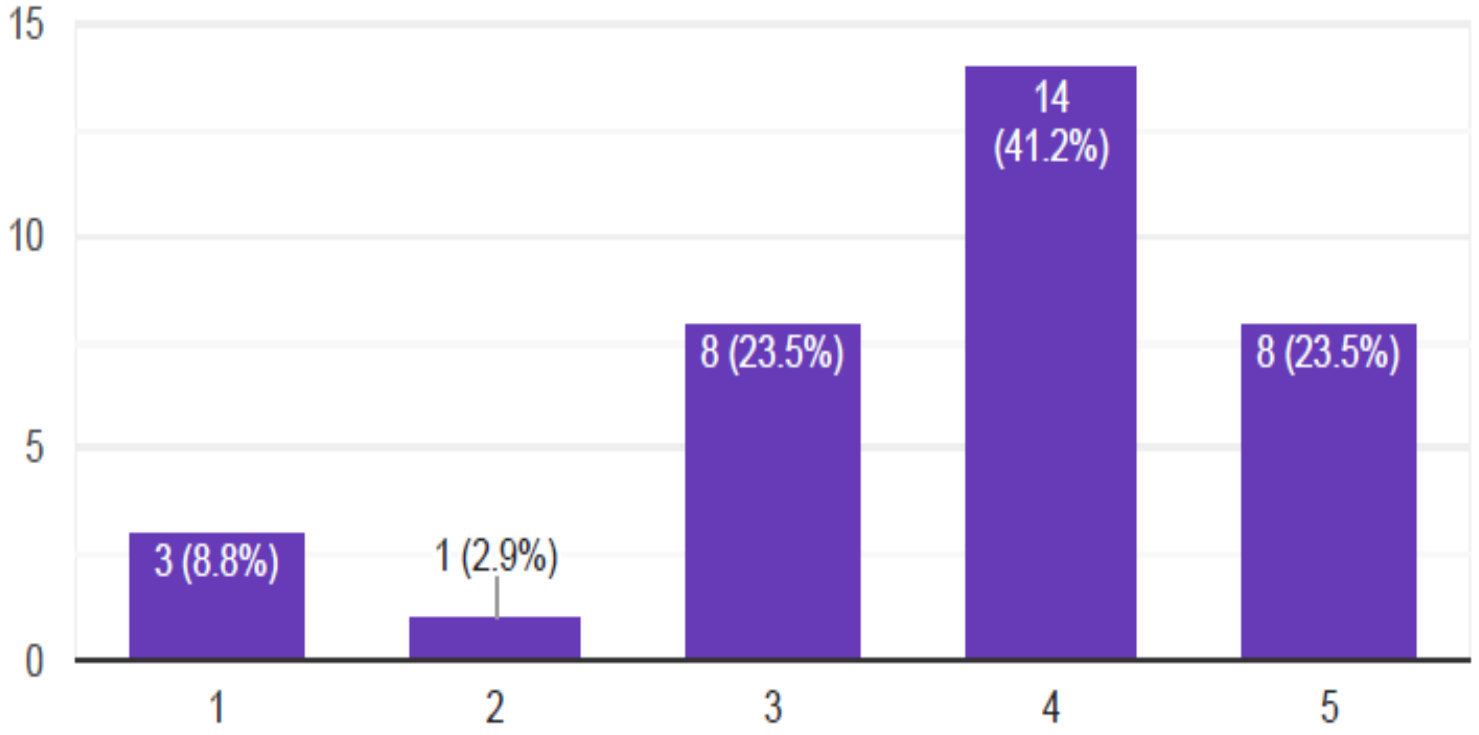
2. How well the instructors challenged the students to do their best? (Scale of 1 to 5)

34 responses



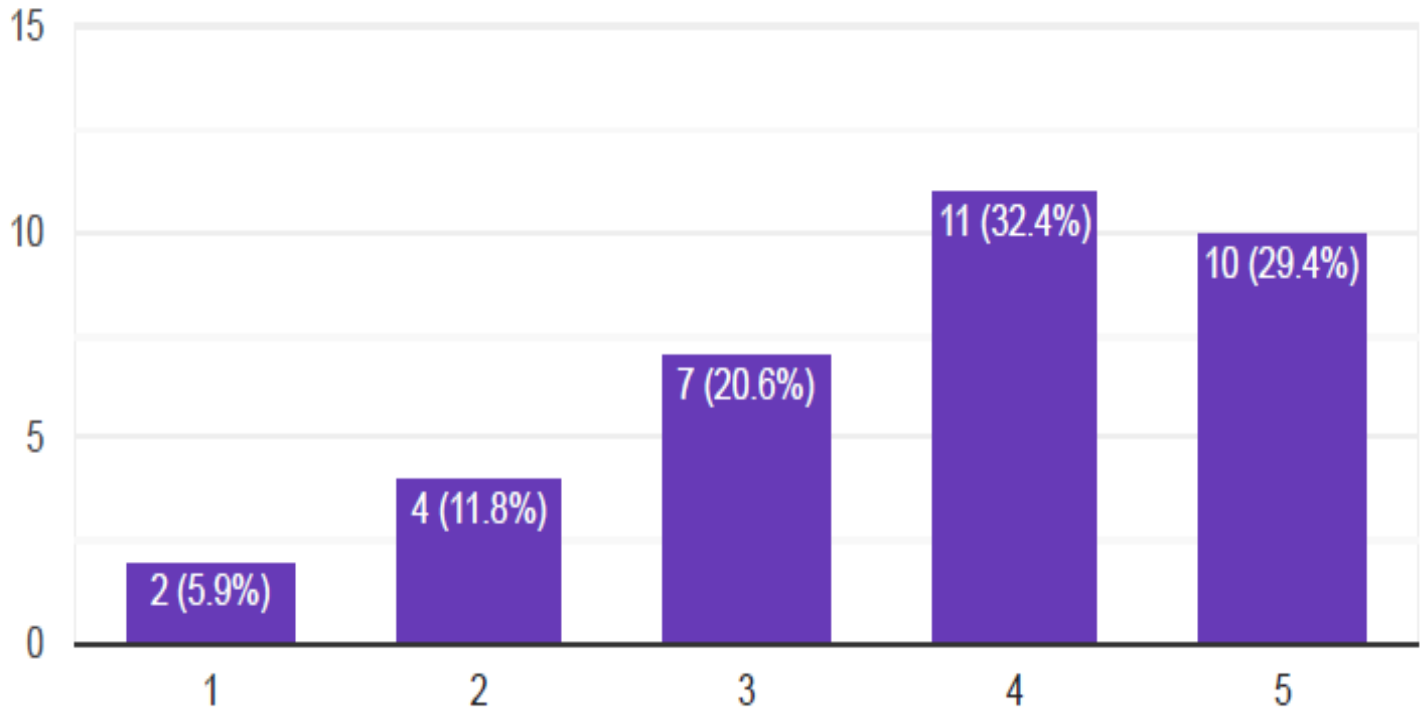
3. Rate your understanding in context of "Linear Algebra" (Scale of 1 to 5)

34 responses



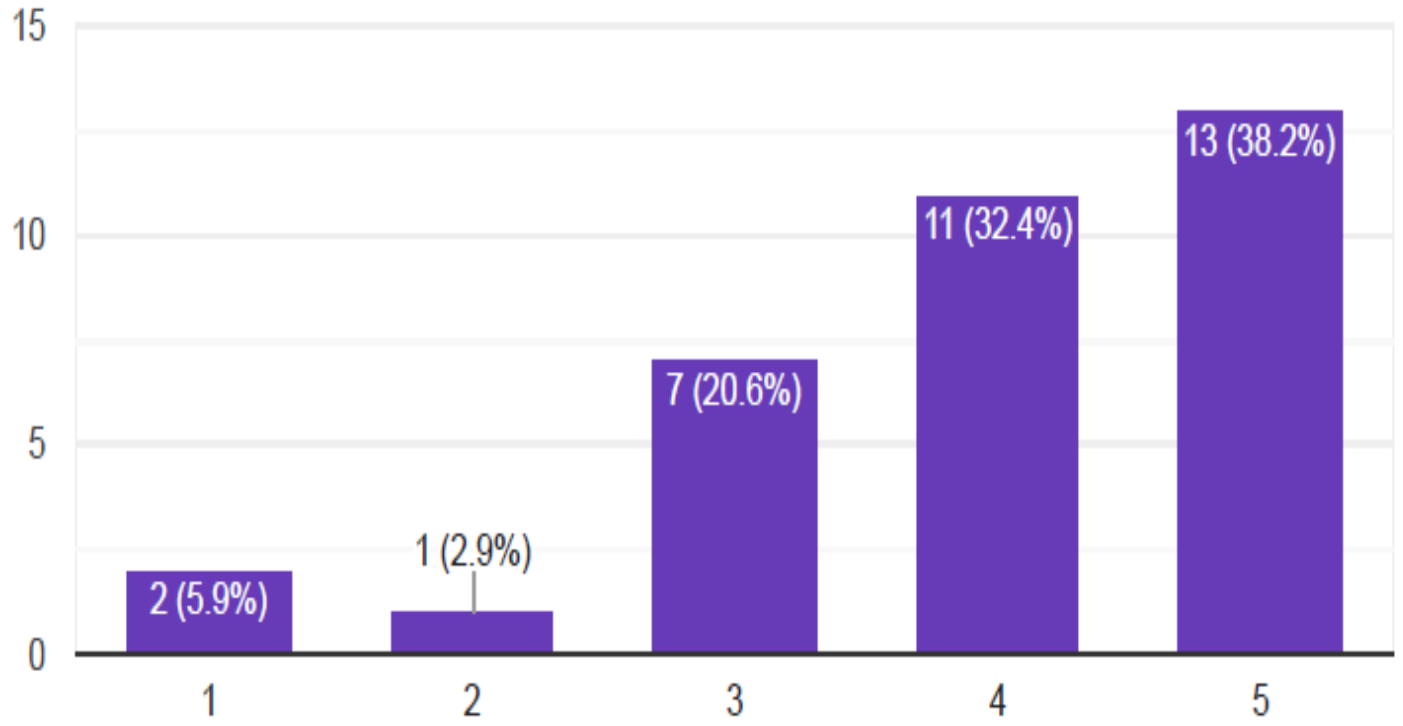
4. Rate your understanding in context of "Basics of Python" covered so far. (Scale of 1 to 5)

34 responses



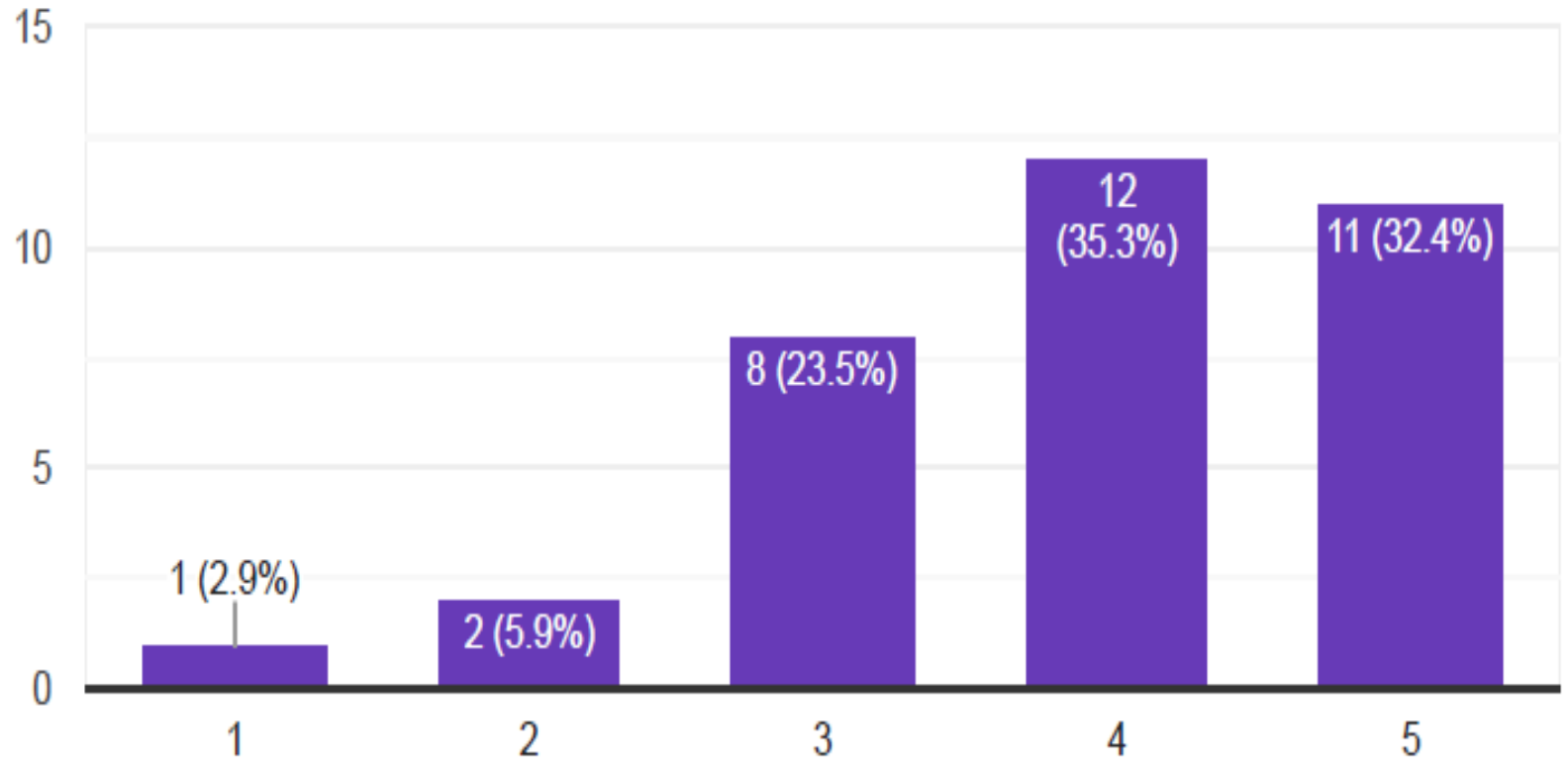
5. Rate your understanding of activity "Encoding-Decoding" (Scale of 1 to 5)

34 responses



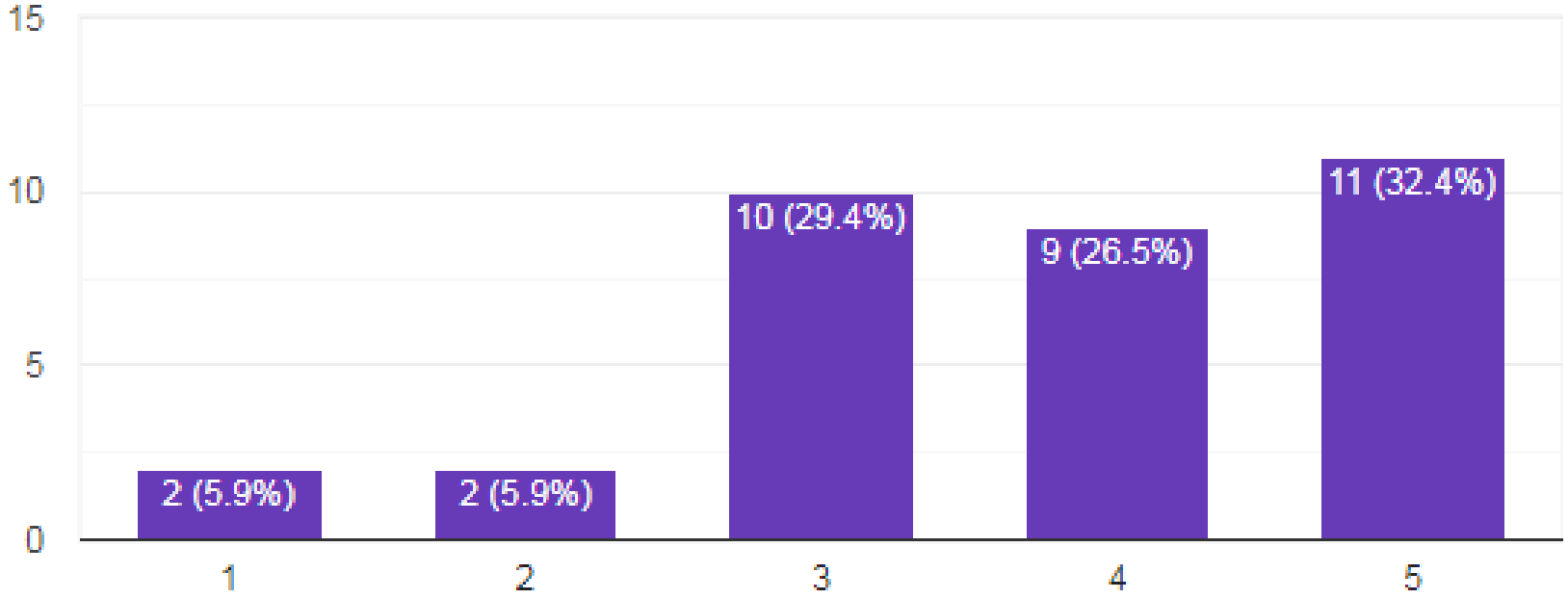
6. How much hands-on-learning was achieved? (Scale of 1 to 5)

34 responses



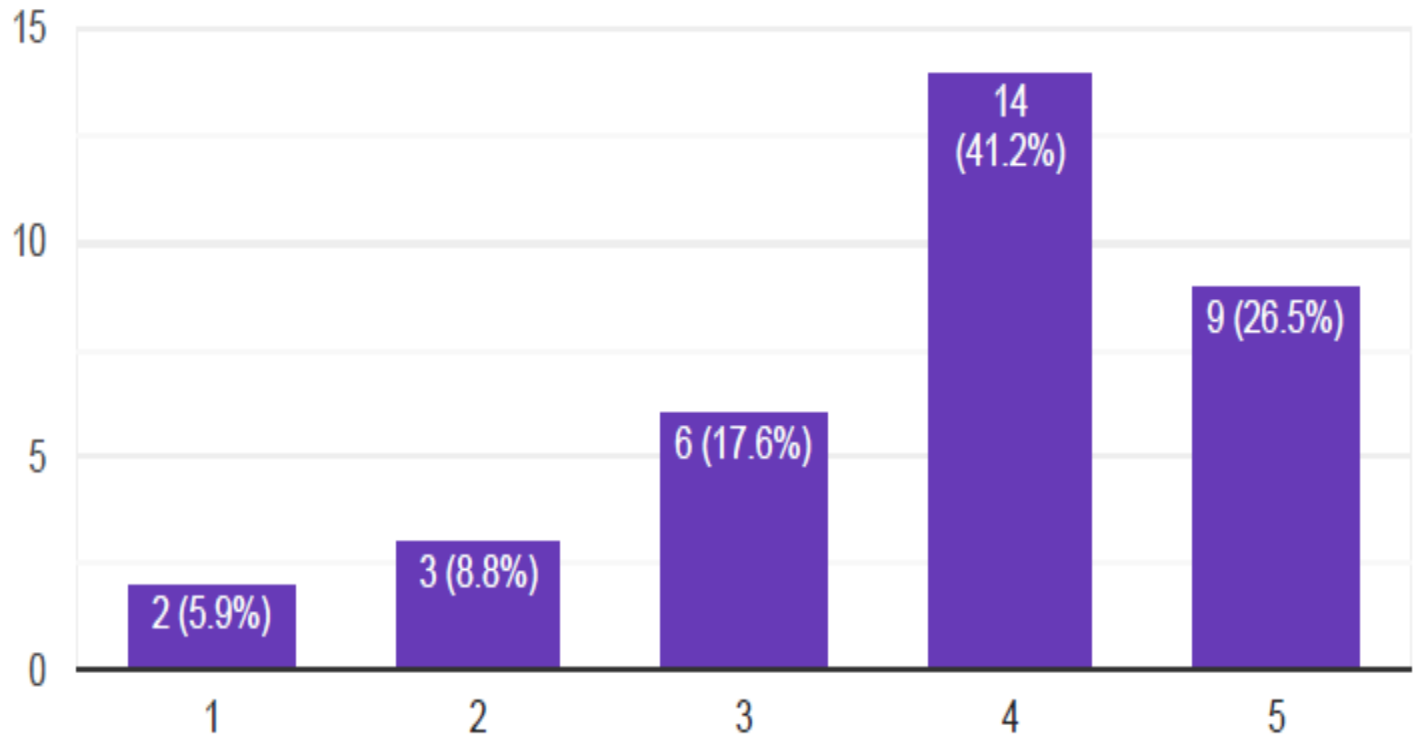
7. How much the Module-1 stimulated the critical thinking? (Scale of 1 to 5)

34 responses



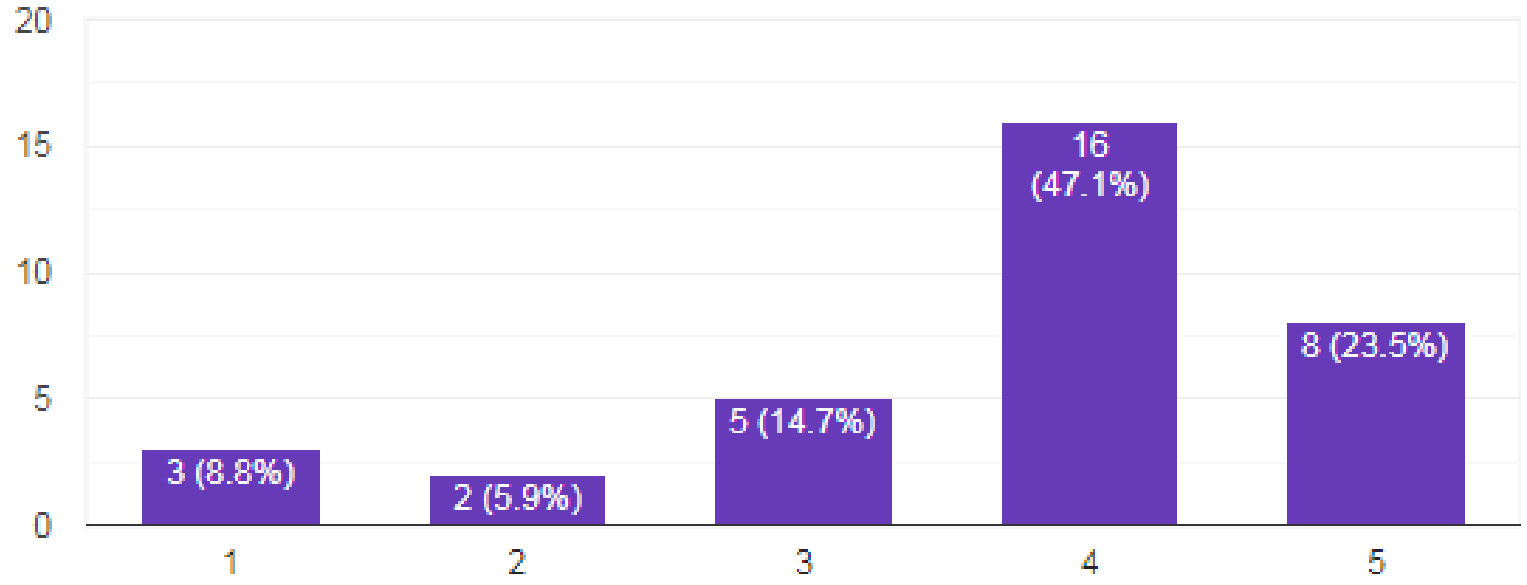
8. How much correlation did you find in the Module-1 & its real world application? (Scale of 1 to 5)

34 responses



9. During this Module-1 how much soft skills (Communication, Teamwork, and Problem Solving) were being developed? (Scale of 1 to 5)

34 responses



Course

- Course File
- Course Planner

Evaluation and Analysis of Project 1

- Individual Viva (Atleast 10-15 mins. To each student)
- Identifying their strengths, weakness and issues
- General Project Observations
  - Meaningful Variable Names
  - Comments
  - Unnecessary Variables
  - Generalized Coding(Avoid Constants to scale the project to different n)
  - Integrating Eigen Vector with Ranking (Description not included in Project)
  - Report Formatting needs to be improved
  - Referencing Are not as per standards

Other Inputs

- Data Collection
- Descriptive Statistics
- Simple Visualization using Python
- Working with CSV Files and Data frames in Python
- Bayes Theorem
- Binomial Probability Distribution
- Assignment on Dataframe and Matplot Lib

Milestones This week

Kick-Start Project 2

Other Components of Statistics and Python would be carried along with Project 2

- Formation of Groups Based on Trait and Allocation of SDG to each Group

- Practice Sheets on
  - Probability
  - Conditional Probability

Group-6

Goal-12 :- Responsible Consumption & Production

Target Distribution :-

1) Resource Consumption.
   a) Mineral Ores → Yash R. Mishra
   b) Coal → Nikhil Agarwal
2) Food Consumption.
   a) Grains → Akshat Awasthi
   b) Fruits & Vegetables → Harshit Singhal

Group-6

Goal-12 :- Responsible Consumption & Production

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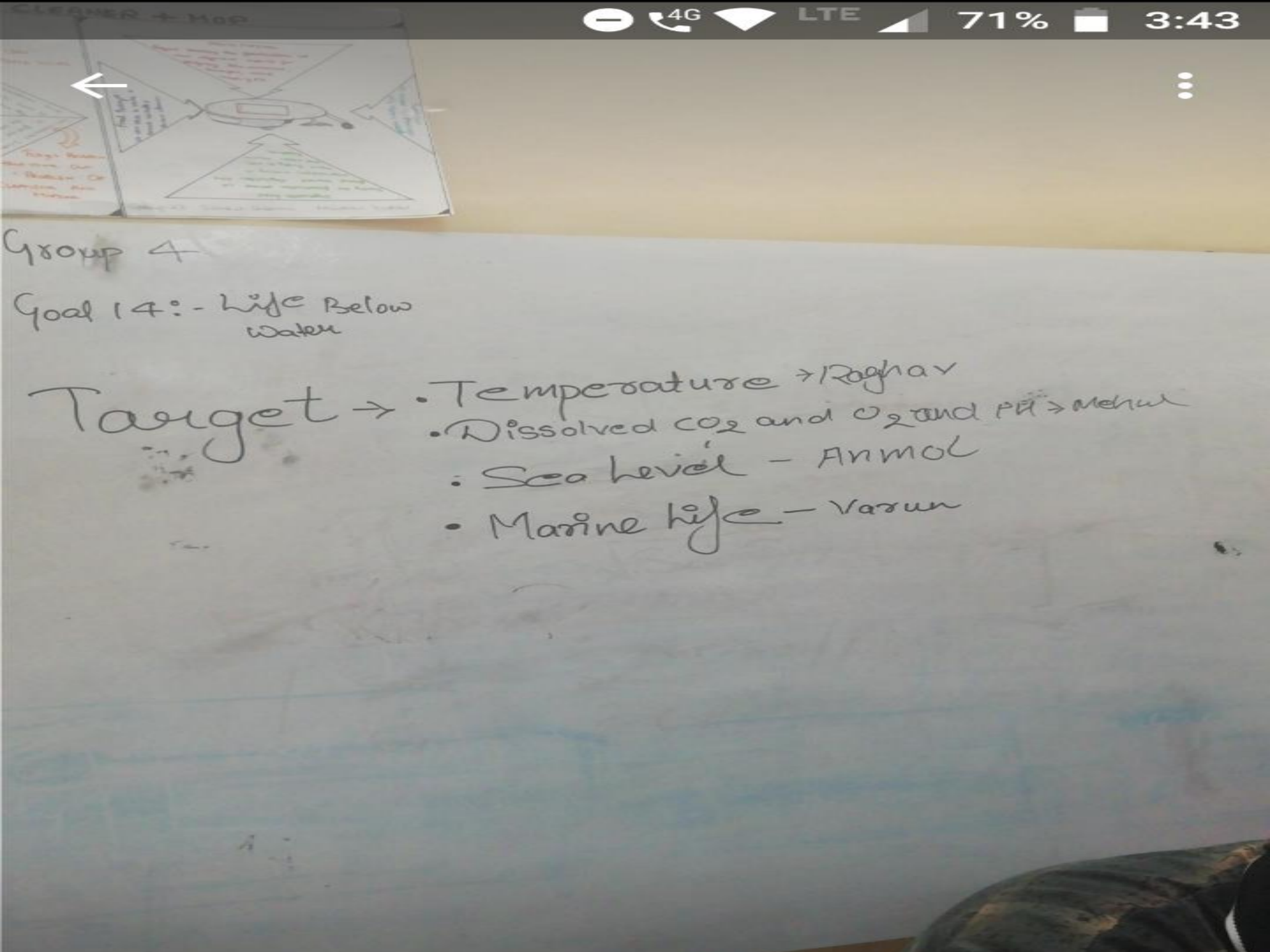
GRP-8

SDG No. 2 → Zero Hunger
(Food Security)

Mid-day meal — Ankur
Ration-System (PDS) — Sangukta
NFSA - Aditya
Meal at (hegh)rate - Kunal


4G
LTE
71%
3:43
Group 4
Goal 14:- Life Below Water
Target → • Temperature → Raghav
• Dissolved CO_2 and O_2 and PH → Mehul
: Sea level – Anmol
• Marine life – Varun

GROUP:- 5

GOAL:- 6 Clean Water & Sanitation

TARGET:- By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals & supply of freshwater to address water scarcity & substantially reduce the number of people suffering from water scarcity.

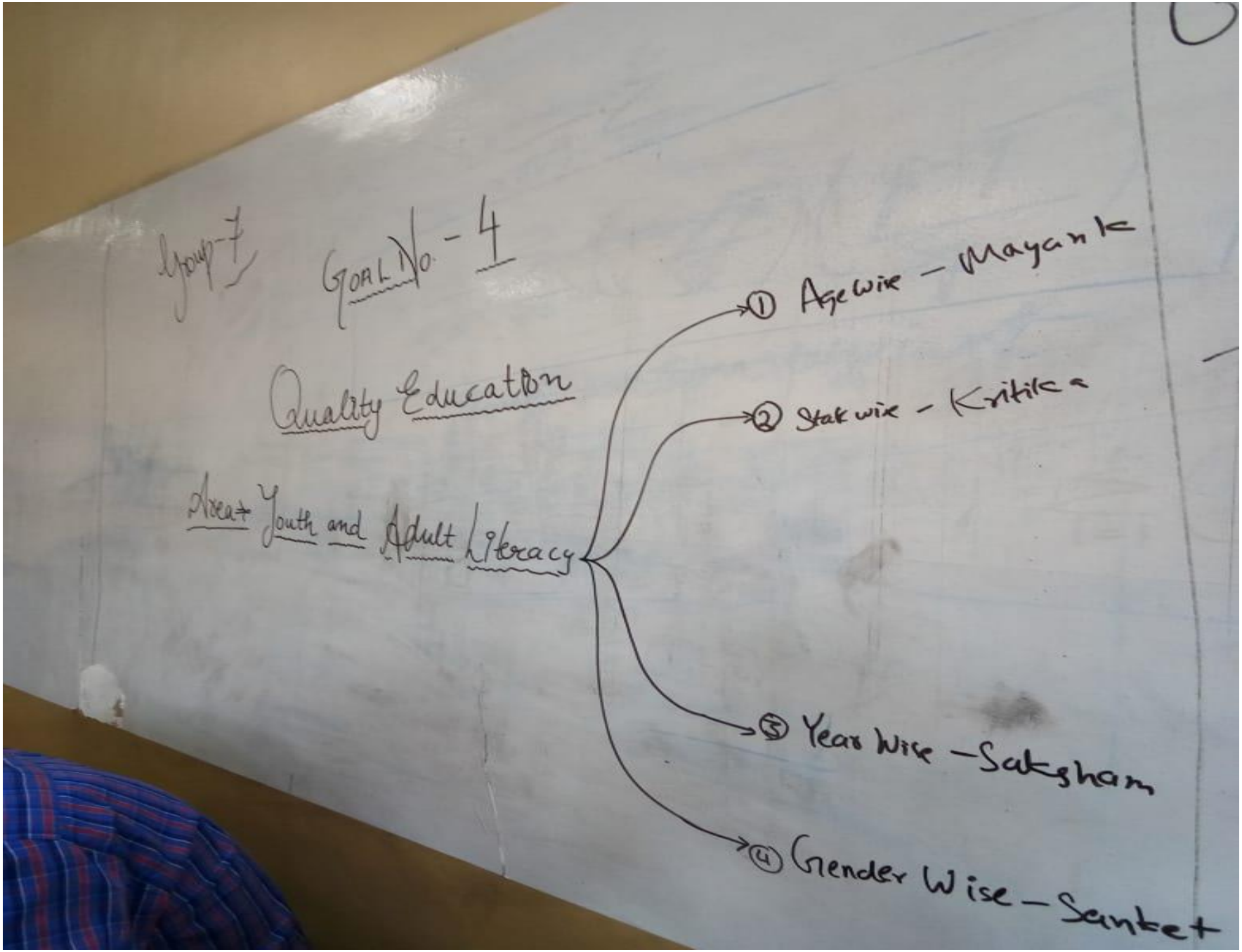
Water Scarcity → Harsh
Water use Efficiency → Pradhuman
Withdrawals of water → Ayush
Supply of fresh water → Gauransh

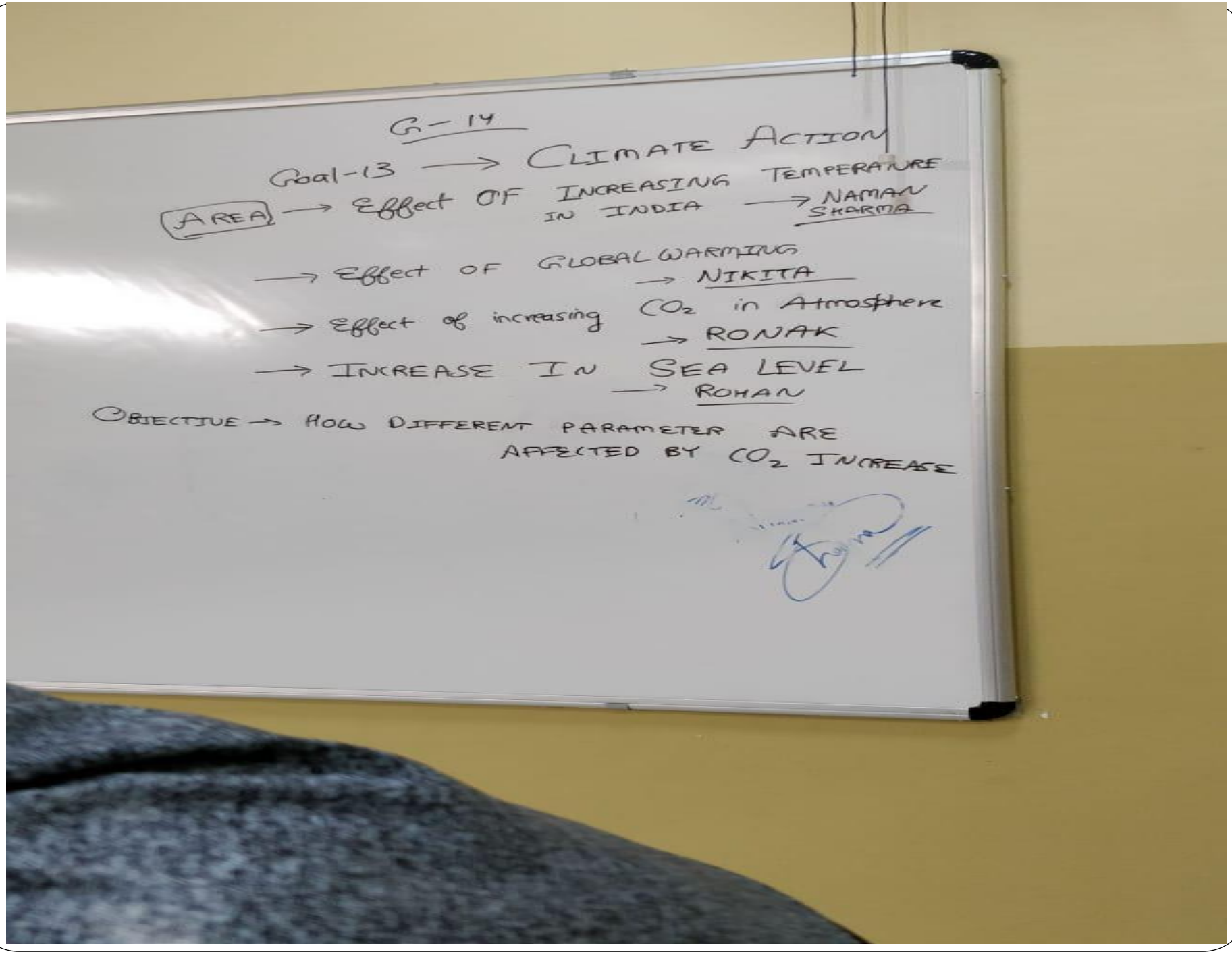
SDG-4 : Quality Education.

Area - Higher Education.

Target distribution :-

- Gross enrollment percentage (Mohit)
- Gender specific (Shreya)
- Access to higher education in rural area (Manaa)


Group-7
GOAL No. - 4
Quality Education
Area: Youth and Adult Literacy
① Age wise - Mayank
② Stat wise - Kritika
③ Year Wise - Satyam
④ Gender Wise - Sanket


G-14
Goal-13 → CLIMATE ACTION
AREA → Effect OF INCREASING TEMPERATURE IN INDIA → NAMAN SHARMA
→ Effect OF GLOBAL WARMING → NIKITA
→ Effect of increasing CO_2 in Atmosphere → RONAK
→ INCREASE IN SEA LEVEL → ROHAN
OBJECTIVE → HOW DIFFERENT PARAMETER ARE AFFECTED BY CO_2 INCREASE

GROUP-13

SDG 1 → No Poverty

Area → Impact of Population over poverty in India

Objective

Performance of States & UT

1. Poverty Rate
2. Health Insurance
3. Maternity Benefits.
4. Homelessness
5. MGNREG Act (2005)

GT-1

GOAL-9 : INDUSTRY, INNOVATION & INFRASTRUCTURE

Infrastructure Sector in India [TARGET AREA]

ALL FORMS OF TRANSPORTATION (Objective)

→ Roads → Aishwaryaditya Jha

→ railways → Rishabh Singhal

→ waterways → Naveen Pratap Singh

→ civil aviation → Varun Pareek

2019/3/18 15:35

Sl-3

Goal-5 Gender Equality

(1) Health Care

- Mortality rate, - Aniruddh
- Life expectancy at birth, female } Sushil
- Malnutrition
- Mental health Concern - Prashant
- Sex-selective abortion - Harshit

Group - 10

Goal - 7

[Affordable & clean Energy]

Objective :- To find which Renewable source is best in terms of affordibility

— And to find the correlation b/w time and % wage, economic growth..

1) Solar energy (Piyush)
2) Wind " (Deeksha)
3) hydroelectric " (Dhruv)
4) Biomass " (Yash)

g-2

GOAL 11 Sustainable Cities & Communities

① Roads & development → Vasdav Sharma

② Electricity Generation → Sucsess Patel

③ Household Electrification – Manav Paseek

④ Infrastructure Projects – Piyush Panwar

G-12

Goal-8

Decent Work & Economic Growth

Target Area → Tourism Industry in India

Objective → Effect of Tourism [illegible] on GDP

East, West, North, South

East - Rohit
West - Aditya
North - Samyak
South - Vanshika

1.) Wildlife

2.) Spiritual

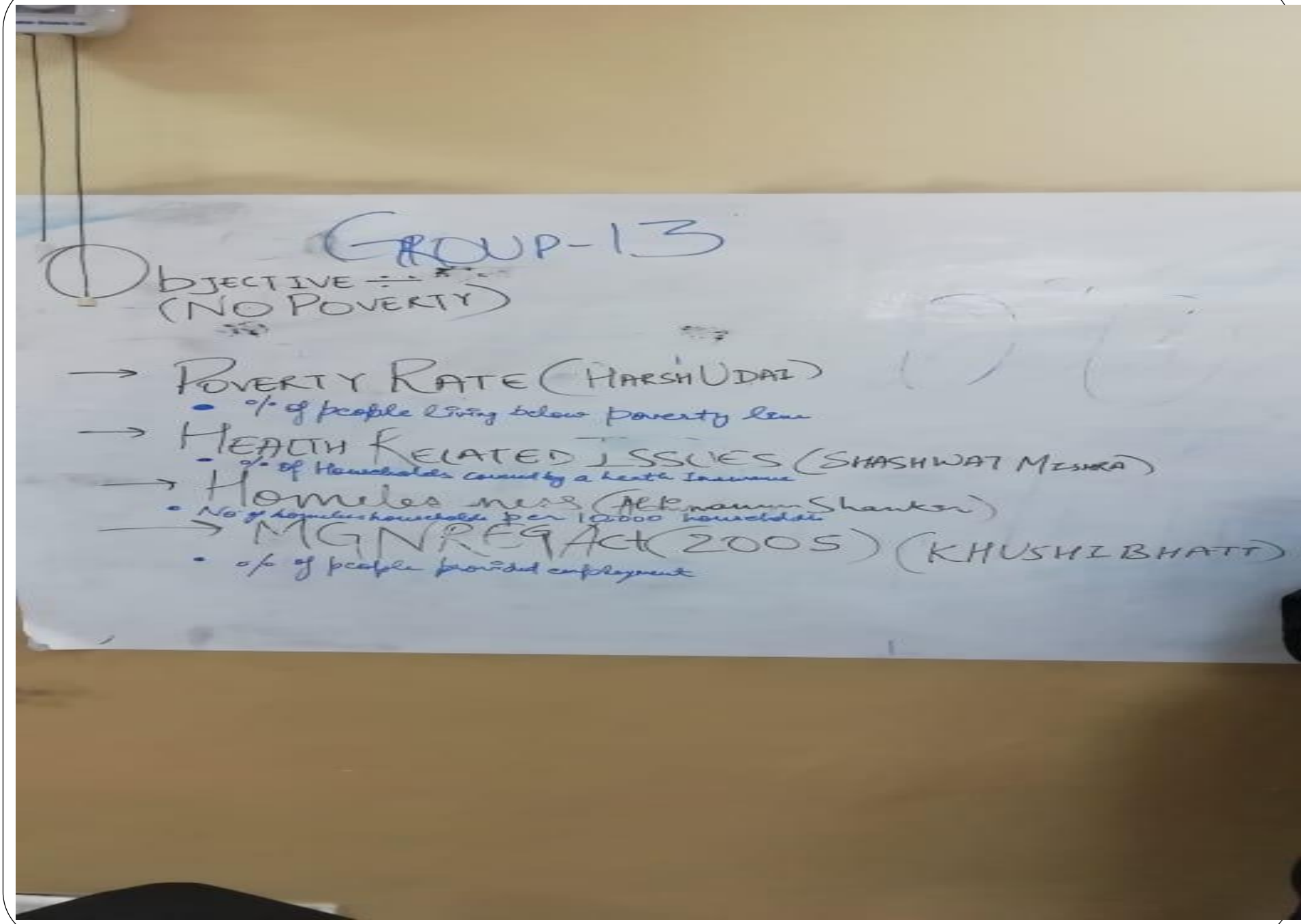
3.) Adventure & Entertainment

4.) Heritage


SDG-3 Good Health and well being
Area: Tuberculosis.
Objective: Data on cases of Tuberculosis in India estimated on TB statistics.
Target Distribution
Indian statewise TB cases. (Shivi)
Details of death report due to TB (Deepak)
Tuberculosis control programme. (Aditya Rathore)
Indian Tuberculosis cases-year-wise (Madhav).
hp

Quiz Schedule

Content	Date	Faculty Co-ordinator	Weight
Lists	26-Mar	Indranath	1
Dictionary	29-Mar	Indranath	1
MatplotLib	2-Apr	Kavita	1
DataFrames	5-Apr	Sonal	1
Functions	9-Apr	Kavita	1
Linear Algebra	12-Apr	Jaya	1
Statistics	16-Apr	Richa	1
Overall Algebra and Statistics	19-Apr	Umesh	1
Overall Python	22-Apr	Sonal	1


GROUP-13
OBJECTIVE :-
(NO POVERTY)
POVERTY RATE (HARSH UDAI)
% of people living below poverty line
HEALTH RELATED ISSUES (SHASHWAT MISHRA)
% of Households covered by a health insurance
Homeless men (Akkamma Shankar)
No of homeless households per 10,000 households
MGNREGA Act (2005) (KHUSHI BHATT)
% of people provided employment

Group - 9

SDG - Quality Education for all.

Area: Higher Education.

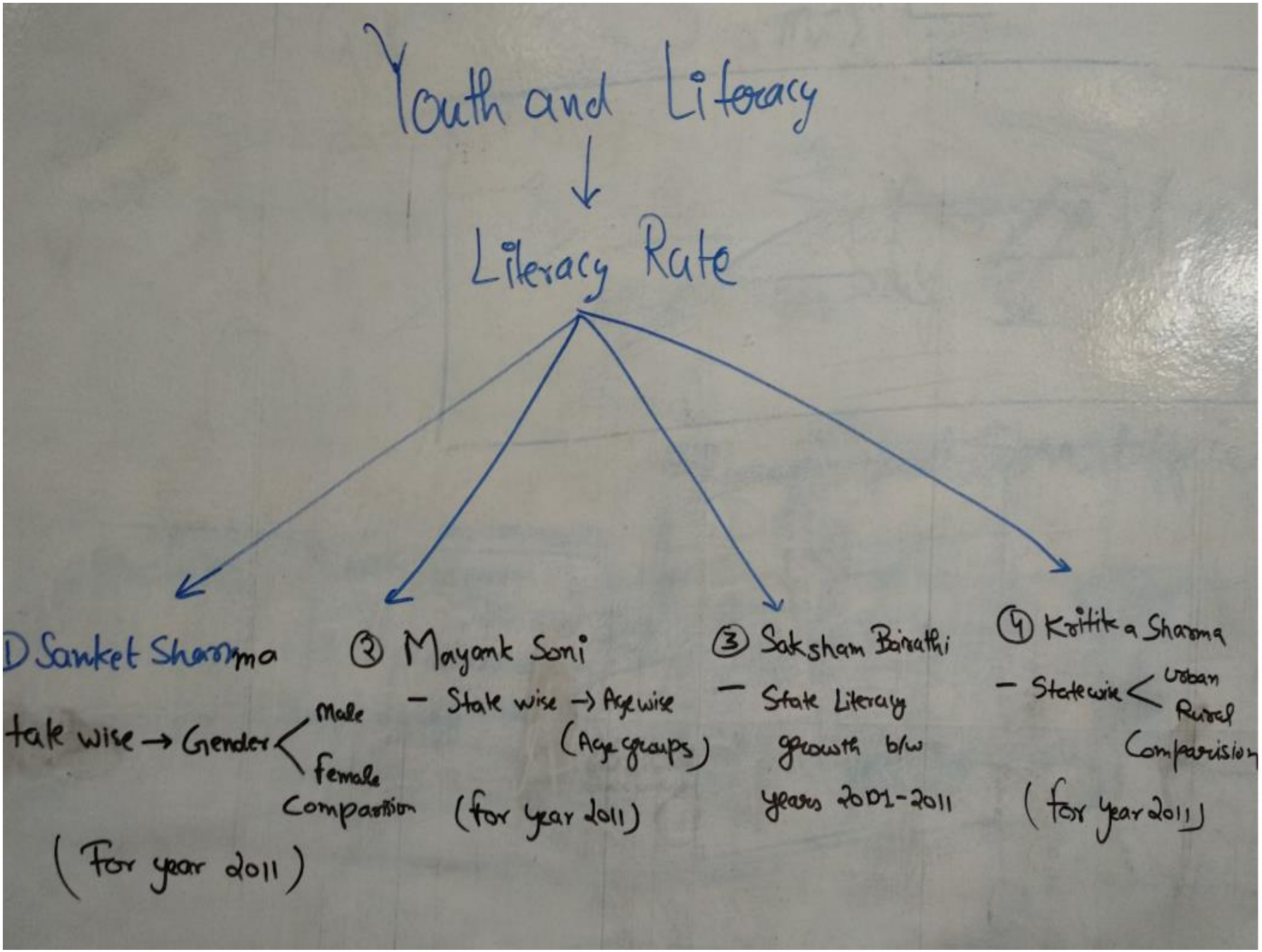
bj :

Mansaa : relation b/w rural area & higher education

Shreya : gender distribution in higher education.

Mohit : Enrollment ratio b/w Males & females in higher education.

Avindhya : Employment ratio w.r.t. higher education.


Youth and Literacy
Literacy Rate
① Sanket Sharma
tak wise → Gender
Male
Female
Comparision
(For year 2011)
② Mayank Soni
– State wise → Age wise
(Age groups)
(for year 2011)
③ Saksham Bairathi
– State Literacy growth b/w years 2001-2011
④ Kritika Sharma
– State wise
Urban
Rural
Comparision
(for year 2011)

OBJECTIVE

→ To derive a correlation b/w production and consumption for each year b/w 2010 to 2019

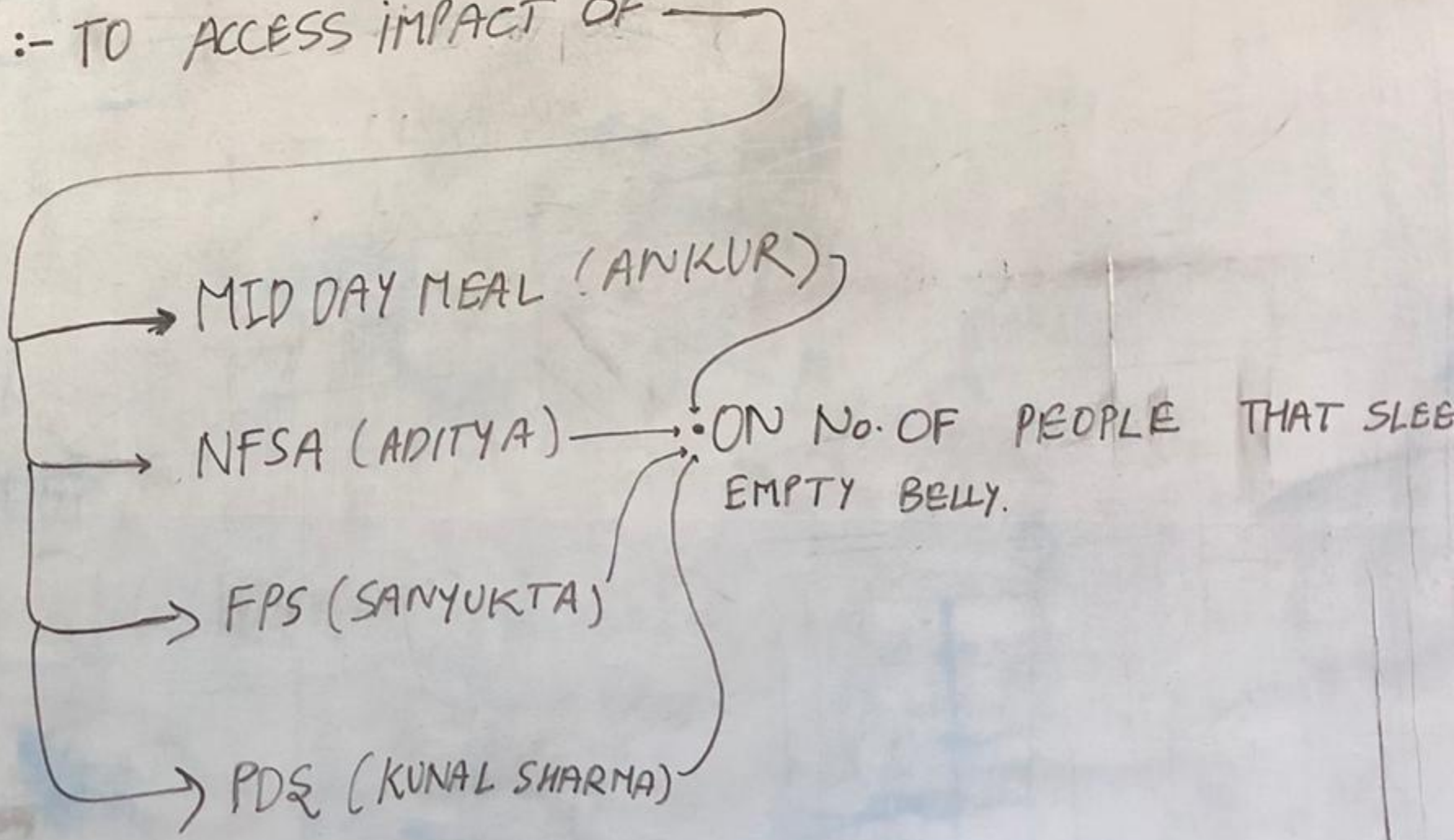
Akshat → To Compare population and consumption of grains in each state.

Yash → To compare production of Ores and their consumption in each state. (2010 — 2017)

Nikhil → To Compare the Cost of Coals in different states based on diff. parameters.

DG-(2) {Food Security}

tive :- TO ACCESS IMPACT OF



Group-2 Target area → TRANSPORT INFRASTRUCTURE

Goal -9

Individual Objective:

1) Rishab → Comparison between Investment & Income in different financial years of railways.

2) Naveen → Comparison between " " " " Waterways.

3) Aishwary. A.J → Comparison b/w " " " " Roadways

4) Varun → Comparison b/w " " " " Civil aviation.

GROUP-2

Target Area- SUSTAINABLE CITIES AND COMMUNITIES

Individual Objective:

1) Piyush: Construction of needful infrastructure in Public areas. (Ex- School, hospital etc)

2) Suresh: Waste comparison b/w different cities & their Waste Management.

3) Manav: Distribution of electricity at every house without any cut on interruption.

4) Vardan: Comparision of quality of

cases

TB

Group 10

Goal: 7

Deeksha - To find relation Between power consump, and power production of wind energy

Dhruv - To find relation b/w consumption & production of Hydroelectric energy

Piyush - To find relation b/w consumption & production of Solar energy.

Yash - To find relation b/w consumption & production of Geothermal.

G-14

Goal → 13 CLIMATE CHANGE

RONAK :- To Analyse the CO_2 Sources and their Effect

NIKITA :- To Analyse the air quality by emission of green house gases

NAMAN :- To Analyse the Effect of Temp. Increase due to Global Warming

ROHAN :- To Analyse the O_3 depletion rate by different gases

GROUP-3 Goal-5

Target Area- Healthcare

Individual objective

(1) Sushil - To compare the life expectancy of female as compared to Male in India and its Jager states.

(2) Prashant - The ratio of female to male deprevive rate.

(3) Aniruddh - To compare mortality rate of maternal vs infant.

(4) Harshit - To analys effect of life threatning diseases. (wrt Gender).

GRO

Ind

1) Piyu

2) Swa

GROUP:-5

Goal 6:- Clean Water & Sanitation

OBJECTIVE :- Ensure availability & Sustainable management of water & Sanitation for all.

Pradhuman → Water use efficiency

Harsh → Water Scarcity

Ayush → Withdrawal of water

Gaurangi → Supply of fresh water.

Group-4

SDG → Life Below Water

Objective → To find the temperature, Sea Level, dissolved CO_2 and PH of Indian Ocean last few years and find their correlation with increase or decrease in Marine life

Raghav → Temperature

Anmol → Sea level

Mehul → dissolved CO_2 and PH

Varun → Increase or decrease in Marine life.

SDG-3: Good Health & Well Being.

Target Area: Tuberculosis

Objective: To correlate cases of TB with different criteria in Rajasthan.

Group: 11

Sub Objective 1: Change in season affecting no of cases of Tuberculosis. (Aditya Rathore)

Sub Objective 2: How does number of cases of TB vary with change in area. (Shivi)

Sub Objective 3: Symptoms and their results for TB. (Madhav)

Sub Objective 4: Effects of Govt. policy implementation on no of cases of TB. (Deepak)

Group

Deeksha - To find rel
and power produc

Dhruv - To find
production of Hyd

Piyush - To find
production of

Yash - To find

Group-19

Target Area: Tourism Contribution in Economic Growth

Objective: Prediction of future tourism rate and its effect on GDP based on past data. [External factors will also get included — like development of an area, connectivity, crime rate, etc.]

- North — Samyak
- South — Vanshika
- East — Rohit
- West — Aditya

→ Each area (North, South, East, West) will have separate tourism increase/decrease based on the past data set and future plans for changing above mentioned factors]

→ Things to do:

- Data Collection — Year - Tourism Rate
- Correlation — Tourism rate - GDP
- Regression
- Now, Data set of future years, tourism & its effect on GDP

Thank you