

PYTHON

week -1

1. Introduction to programming language.

- » Creating flowcharts (Introduction problem solving)
- » Example flowchart for making tea.

2. What are types of programming languages?

- » Examples.

3. What is Python?

4. Why we use Python?

5. Where we use Python?

- » Scientific/Industrial applications
- » Real world applications

6. Installation and path setting.

7. Basic syntax in Python.

8. Hello world program.

9. Comments in Python

- » Single line
- » Multiline

10. Input and output basics

11. Variables and Datatypes

- » Integer
- » Float
- » String
- » Boolean

12. Strings and typecast

- » String manipulation
- » String concatenation

13. Operators.



PYTHON

week - 2&3

1. CONTROL FLOW

- » If, else statements
- » If, elif statements
- » Nested if statements
- » Nested if, elif statement
- » If ladder
- » Break and continue.

2. Loops

- » While
- » For, range
- » Break and continue
- » If and else in loops



3. Data structures

- » Lists
- » Tuples
- » Sets
- » Dictionary

4. Functions

- » Default arguments
- » Passing arguments
- » Multiple arguments
- » Return
- » Multiple return from function
- » Pass statement

5. File handling

- » Read
- » write



PYTHON

week - 4

1. Pandas

- » Reading Csv files, excel files
- » Data handling
- » Creating Csv files using pandas

2. Data analysis using matplotlib and pandas

3. Numpy

Main Project:

1. Webscraping data analysis(cricket scores)
(Or)
2. Data analysis using given dataset

