**Day-04**

**22-02-2025**

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**Python Program**

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Program:

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-> Collection of instructions.

Syntax:

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-> Set of rules for writing/developing of any program/script.

Types of python programs

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-> There are two types of python programs:

 1) Static program

 2) Dynamic program

-> Static program can give the same output for any number of times of execution.

Ex:

a = 10

b = 20

a + b ==> 30

-> Dynamic program can give the output based on input what we have processed.

Ex:

a = input()

b = input()

a + b

 a = 100, b = 200 ==> output ==> 300

 a = 99, b = 77 ==> output ==> 176

 a = 1001, b = 2002 ==> output ==> 3003

Ex**: Phonepe**

 **P1 ==============> p2**

 **using mobile**

 **amount: 3000**

 **amount: 4500**

Prerequisite for python program

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-> Python software

Python Software Installation:

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-> Free software

-> Open source

Python Version History:

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Developed by : Guido Van Rossum, 1990

Python 0 ==> 1991

Python 1 ==> 1994

Python 2 ==> 2000

Python 3 ==> 2008

current version ==> 3.13.2

Downloading and Installation of Python:

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1) use the below link, to find the python software

 https://www.python.org/downloads/

2) according to your system configuration, start download the python software.

3) After the downloading:

 click on that file to run it for the installation.

4) In the new wizard/window:

 i) select an option(check list) "Add Python.exe to PATH"

 ii) If you want to install the python software into C-drive, then click on "Install Now" option.

 iii) Otherwise, if you want to install the python software in any desired/targeted folder, then click on "customize installation".

 iv) After the click on "customize installation",

 click on "next"

 click on "Browse"

 then select your folder and click on "ok"

 finally click on "install"

 then click on "close".

5) To confirm whether the python software is in our system or not:

 open the command prompt

 type a command: "python --version"

 and hit enter

Where we can write python programs:

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-> there are two options:

 1) using text editors like: notepad or notepad++ etc.

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 1) open the notepad file

 2) save that file into any folder with ".py" extension.

 3) write the code

 4) save that code (ctrl + s)

 5) Execute that code:

 open the location that where python file created

 copy that location

 start the command prompt

 use the below command:

 $ cd path

 => navigating to the file location

 run the python by using below command:

 $ python file.py

 or

 $ py file.py

 2) using IDE (Integrated Development Environment)