Programming Language :→

⇒ Instruction or Commands to perform a Specific task.

✓ Algorithms :→
A step by step process to Solve a problem.

↳ B →

= Syntax :⇒ The rules or Structure of programming Language.

RAHSUT → TUSHAR

T
U
S
H
A
R

✓Variable :→ Container that Store data
↳ Algebric Variable ⌐
x + 5 = 10
x = 10 - 5
x = 5

↳ Random Variable
① Descrete (whole) :→ 1,2,3,4. --- ∞
② Continious :→ 1, 1.2, 1.4, 499, 4.999,
5.9

Variable Name :→ [TUSHAR] = 10   name ↓ (Y)= (x)=

A =   B =
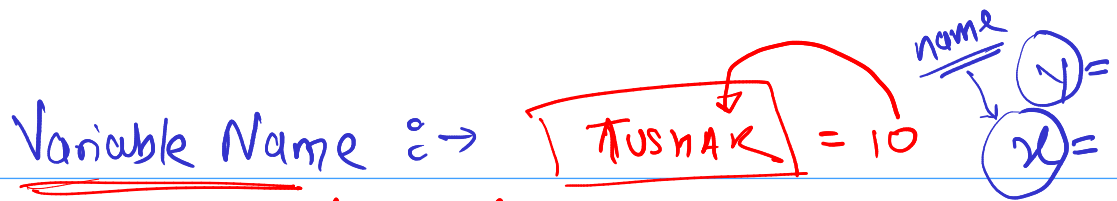
Name / [PMModi] =   = The Name where we

Store the data .

Data Types :→

$x = 5$ ⟶ Intiger (Whole no)

0.5 ⟶ Float

always in Quation → "Tushar" ⟶ String   "11" → string   "0.5" string

'Tushar' ⟶

True /False ⟹ Boolean

$3 + 4j$, $9 + 2i$ ⟹ Complex

None ⟹ None data Type.

Operators :→ All symbols that we use for
Calculation

+ → add   ** —
— → Sub   // —
* → multi   %
/ → divide

Conditional Statement :→ Decision Making.

IF , ELSE , ELIF
यदि   तो

LOOPS :→ Repedating Tasks

↳ FOR   ↳ WHILE

FUNCTION :→   Reusable block of code.

Compiler :→ Code transalated to Machine Language
.   (01010101)

IMP = Interpreted Language :→

Code is executed line by line.

What is python :→
                 Python is a high-level programming
language , Interpreted Language, general purpose
         Language .

It is widely used for web-development, Data Analyst,
Data Science , Automation, Artificial-Intelligence &
     many more.

<u>Key Features</u> :→ ① Easy to Read & Write.

② Open Source

③ Portable (work on windows, mac, Linux, ios)

④ Interpreted (Line by Line execute & no need to Compile)

⑤ Support OOP (object-Oriented programming)

⑥ Extensive Standard <u>libraries</u>.

⑦ Dynamically <u>Type</u> :→ no need to define data type.

―――――*―――

<u>IDE</u> ⇒ Integrated Development Environment

↳ It is a software that provides tools to <u>write</u>, <s>test</s> & <u>debug</u> code.

↳ IDLE (come with python)   <u>online</u>
↳ PyCharm
↳ VS code
↳ Jupyter Notebook   ― Google Colab

→ Spyder.   RAM | ROM

― <u>Anaconda</u> =