2.

Variables & Datatypes

A Variables is the name given to a memory location in a program. for example

```
a = 30
b = 'Tejas'
c = 0.07
```

Data Types

primarily there are following data type in python.

1] Integer
2] floting point Number
3] String
4] Booleans
5] None

* python is a fantastic language that automatically Indentify the data type

Rules for Defining a Variables

- A Variable name can contain alphabates, degits & underscore.
- A Variable name can only start with an

an alphabates & underscore.

- A variable name cannot start with a digits.
- No white space is allowed to be used inside a variable name.

Example of few variables name are

'Tejas', 'one8', '_even', 'programmer' etc.

Operator in pythons

Following are the common operator in python.

1] Arithmatical operator → +, −, *, / etc.

2] Assignment operators → =, +=, -=, etc.

3] Comparision operator → ==, >, >=, <, != etc.

4] Logical operator → and &&, or ||, not !

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type() functions & Typecasting

type function is used to find the data type of a given variables in python.

```
a = 31
type(a) → class <int>

b = "31"
type(b) → class<str>
```

A number can be converted into a string & vie verse (if possible).
There are many functions to convert one data type into another.

str(31) → "31" → Integer to string Conversion.

int("31") → 32 → string to Integer Conversion.

float(32) → 32.0 → Integer to float Conversion.

Here '31" is a string literals & 31 a numberic literals.

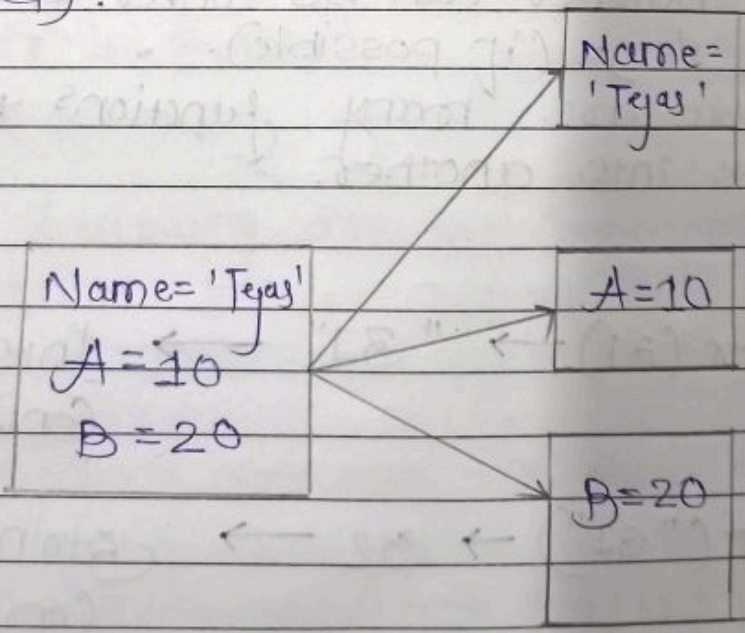
Input() function is

This function allows the user take input from the keyboard as a string.

a = input("Enter Name") → Now a is equal to "Tejas", the user entered the Tejas.

It is important that the output entered by the user is always a string (Even if the number is entered).

→ If a is "54" the user enters 54.



Practice Set

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1] Write a program to add two numbers

2] Write a program to find reminder when a number is divided by 2.

3] Check the type of variables assigned using input() function.

4] Use comparision operator to find whether a given variables a is greater than 'b' or not.
Take a = 34 & b = 80

5] Write a program to find average of two numbers entered by the user.

6] Write a python program to calculate square of number entered by the user.