**Python for Beginners:**

**Example number 1:**

**Input: print (“Nallendiran”)**

**Output: Nallendiran**

**Example number 2:**

**Input: print (“Hello World”)**

**Output: Hello World**

**1.Variables?**

**Input:** a=10

b=10

print (a+b)

**Output:** 20

**Notes: a and b are called variables**.

**2.Datatypes:**

a). **Numbers** are called as **integer type.**

b). **Words** are called as **String type**.

**Program 1: Integer**

**Input:**

**a=10**

**print (type(a))**

**Output:**

**<class ‘int’>**

**Program 2: String**

**Input:**

**a=”Nallendiran”**

**print(type(a))**

**Output:**

**<class ‘str’>**

**Notes: str – string, int – integer.**

This code is **print (type(a))** used to identify the **integer type** and **string type.**

**3.Operator.**

In python we have more operators.

Example we take one simple program.

Input:

a=10

b=20

c=a+b

print(c)

Output:

30

Here from above program in input – (=), (+) equal to and plus are the operators.

**Notes: We have more type of operators are there.**

**4.Casting.**

**Simple example for string concatenation. (concatenation means combine)**

Below simple program input for our example.

**Input:**

**a="10"**

**b="20"**

**c=a+b**

**print(c)**

**Output:**

**1020**

**If you use double “quotation” in integer(number). The integer is converted into string(word).** It is simply called as **string concatenation**, where two strings (a and b) are **combined**. So the output displayed as 1020.

b). **Explicit Casting**

**a = "10"**

**b = "20"**

**c = int(a) + int(b) Here we cast the strings to integers**

**print(c)**

**Output: 30**

**(or)**

**You can use below program also**

**a = int ("10") Here we cast the strings to integers**

**b = int ("20") Here we cast the strings to integers**

**c = a+b**

**print(c)**

**Output: 30**

**b). Now we will see How to get Input from user?**

Simple program example for **How to get Input from user?**

**Program Input:**

**a=input ()**

**print(a)**

**Output:**

30

30

This program is commonly referred to as a **"program to get input from the user."** It simply captures and displays user input. It simply captures and displays user input.

a=input ()

b=input ()

c=a+b

print(c)

**In python we need to know BOADMAS Rule.**

**BOADMAS RULE:**

**B 🡪 Brackets (), {} , [].**

**O 🡪 Order(Roots and Powers) / of**

**D 🡪 Division** ÷

**M 🡪 Multiplication x**

**A 🡪 Addition +**

**S 🡪 Subtraction –**

**Example to solve the sum:**

**Brackets:**

**½ [ { -3 (1 + 2)} 10]**

½ [ {-3x3}10]

½ [ -9x10]

½ [-90]

**Answer: -45**

**Simple Addition Program:** **Input from user and convert into as integer.**

**Program Input:**

**a=int (input ())**

**b=int (input ())**

**c=a+b**

**print(c)**

**Output:**

**50 Input number I have entered**

**60 Input number I have entered**

**110 Here two input number was added output was displayed.**

**Input:**

**name = input ()**

**age = input ()**

**Address = input ()**

**print ("My name is:", name)**

**print ("My Age is:", age)**

**print ("My Address is:", Address)**

**Output:**

**Nallendiran Here I have entered the name.**

**27 Here I have entered the age.**

**Grain Bazaar Street, Attur. Here I have entered the address.**

**Basic Arithmetic Operations and** **User Input**.

Sample Program Task 1:

Get integer Input for variable a, b, c and gets using input (“Please enter a value for a:”) method.

Multiply all 3 variables (a\*b\*c)

Add all 3 variables (a+b+c)

Divide the multiplied value by added values and get the output.

**Sample input:**

2

3

4

**Program Input:**

a = int (input ("Please enter a value for a: "))

b = int (input ("Please enter a value for b: "))

c = int (input ("Please enter a value for c: "))

d= a\*b\*c

e= a+b+c

f= d/e

print ("your result is:”, f)

In the output I have to enter the below Input.

2 I have entered this number

3 I have entered this number

4 I have entered this number

Output:

Please enter a value for a: 2

Please enter a value for b: 3

Please enter a value for c: 4

your result is: 2.6666666666666665

**Sample Program Task 2:**

Get Input for variable name, score, department.

Get score for 100;

Divide 100/10

**Sample Input:**

Nallendiran

99

Commerce

**Program Input:**

name = input ("Enter your name: ")

score = int (input ("Enter your score: "))

department = input ("Enter your department: ")

print ("My Name is:", name)

print ("My Score is:", score / 10, "/10")

print ("My department is:", department)

**Output:**

**My Name is: Nallendiran**

**My Score is: 7.8 /10**

**My department is: Commerce**

**5.If else**

Simple If else program for understanding:

Please Note: Python is a case sensitive language.

**Program Input:**

if(False):

print("Yes”)

else:

print("No")

Output:

No

(or)

**Program Input:**

if(True):

print("Yes”)

else:

print("No")

Output:

Yes

**Comparison Operator: Operator which is used to compare two variables.**

“==”is one of the comparison operator

**Simple Input:**

print (“win” ==” win”)

Output:

True

**2.Simple Program Input:**

print (“win” == “winn”)

Output:

False

JFI: In the above input I have mentioned win=winn here I have made one mistake so the output displayed as false.

Example of comparison Operator:

Input:

rcb="win"

if(rcb=="win"):

print ("Ee sala cup namdhe")

else:

print ("Valakkam pola namakku cup illa")

Output:

**Ee Sala Cup Namdhe.**