

Day-3  
03/11/2025

\* write a Program to Calculate 'Square of Given Number'?

As ① `num = int(input("Enter your value"))` # to give Input Value  
`Print(num*num)` # To Print the Square of the Entered Value.

\* o/p Function Methods of IT :-

① General Printing :- ② Format M :- ③ FString M :-

`n = input("Enter your name")`  
`P = input("Enter your place")` } # the variable for Giving Input i.e., (NAME & place)

① `Print("My NAME is", n, "I am from", P)`

# To Print the place & Name by General Printing method.

② `Print("my name is {n}, I am from {P}, format(n, P))`

# To Print the place & name by the Formatting method where we can use format for printing.

③ `Print(f" Myname is: {n}, I am from: {P}")`

# To Print n, P by F string Method by giving direct values in Braces. & using F letter of string.



## \* Data types :-

⇒ A Data type in Python is classification that specifies the type of value a variable holds & determines what operations can be performed on the data.

⇒ In simple terms, data type tells Python what kind of data is being stored in a variable.

- Single value data type :-

## \* Built in Data types in Python :-

<u>Category</u>	<u>Datatype</u>	<u>Example</u>	<u>Description</u>
<u>Numeric</u> :-	<u>int</u>	$x = 10$	stores whole numbers
	<u>float</u>	$y = 10.5$	stores Decimal value
	<u>Complex</u>	$z = 3 + 5j$	stores Complex numbers ( <u><math>a + bj</math> form</u> )
<u>text</u> :-	<u>str</u>	name = "Sai"	stores text (sequence of characters)
<u>Boolean</u> :-	<u>bool</u>	flag = true	Represents True/False values
<u>Sequence / Collection</u>	<u>list</u>	marks = [45, 76, 95]	ordered, changeable list of items.
	<u>tuple</u>	data = (5, 10, 15)	ordered, unchangeable collections

<u>Category</u>	<u>Datatype</u>	<u>Example</u>	<u>Description</u>
	range	range(1, 10)	Represents a sequence of numbers
<u>Set</u>	Set	{1, 2, 3}	Unordered collection of unique items.
	Frozenset	Frozenset {1, 2, 3}	Same as set but Immutable (unchangeable)
<u>Mapping</u>	Dict	{ "name": "Rohit", "age": 20 }	Stores data in key-value Pairs.
<u>Binary</u>	bytes	b"hello"	Stores byte data
	bytearray	bytearray(5)	Mutable byte data
	Memoryview	Memoryview (byte(5))	used to access memory of Binary data.

To know type of Data we can use :-

- A = True # variable that stores true

type(A) # To know the Data-type of the variable.



⊗ write a program to calculate area of rectangle, triangle, circle?

A " " AOR = L X B

AOT = 0.5 X B X H

AOC = 3.142 X R X R

l = float (input ("Enter a len of rec: "))

b = float (input ("Enter breadth of rec: "))

Base = float (input ("Enter Base of tri: "))

Height = float (input ("Enter height of tri: "))

Radius = float (input ("Enter Radius of cir: "))

AOR = l x b

AOT = 0.5 X Base X Height

AOC = 3.142 X Radius X Radius

Print ("Area of the Rectangle: {AOR} \n the Area of triangle: {AOT} \n the area of circle is: {AOC}")

# In Area of Rectangle the AOR is defined that l x b the values are taken / input will be given from user

# In same way for triangle & circle.