04/09/2025

Comments:

They are part of the code, but they are not considered during execution.

Two types comments in python:

1) Single line comments:

   Start with a # symbol.

   ex: #my 1st Program

2) Multi line comments:

   It is also known as block comments. Usually done with triple quotes.

   ‘ ‘ ‘ ’ ’ ’ (or) “ “ “ ” ” ”

   ex: '''

   This is a

   multi-line comment '''

   print("Hello, world!")

Keywords:

They are reserved words used for specific tasks and cannot be used as identifiers, such as variable or function names.

ex: True, False, for, while, if, else, break, try, except, finally.

Variables:

It is a place used to store values. ex: a=5

a is variable a is value

Valid variable declaration:

a = 5

A = 7

num = 11

Num1 = 89

NUM2 = 15

empid = 123

emp_name = "abc" or 'abc'

_emp_no_ = 91234256789

Invalid variable declaration:

An invalid variable declaration occurs when a variable name breaks Python's naming rules, such as starting with a number, using special characters, or using reserved keywords.

ex:1n = 35

stu#name@ = "abcd"

stu id = 234

Data Types:

It is a predefined component that specifies the category or type of data.

(or)

It is a built-in component used to define the type of data.

Python data types:

int, float, complex, str, bool

Special data types (Data structure):

list, tuple, set, dict

ex: a=7

type(a)

o/p: int

ex: name= “thanu”

type(name)

o/p: str

Input function:

input ( ) function in python is used to take input from the user as a string.

Output function:

The output function in Python is typically the print() function, which is used to display information (such as text, variables, or results) on the screen or console.

ex: a=int(input())

print(a)

o/p: 4

4

Program: Take 2 float numbers from user.

```
a=float(input("enter the number"))

b=float(input("enter the number"))

print(a+b)

print(a,"+",b,"=",a+b)

print("sum of",a,"+",b,"=",a+b)
```

```
#.format method

print("sum of {} + {} = {} ".format(a,b,a+b))


#fstring method

print(f"sum of {a} + {b} = {a+b}")
```

o/p: enter the number 2

enter the number 3

5.0

2.0 + 3.0 = 5.0

sum of 2.0 + 3.0 = 5.0

sum of 2.0 + 3.0 = 5.0

sum of 2.0 + 3.0 = 5.0

Program: Write a program to calculate the area of triangle and circle with given input.

```
b=float(input())

h=float(input())

r=float(input())

aot=0.5*b*h

aoc=3.142*r*r

print(f"The area of triangle is {aot}\nThe area of circle is {aoc}")

print(f"The area of triangle is {0.5*b*h}\nThe area of circle is {3.142*r*r}")
```

o/p: 2

3

4

The area of triangle is 3.0

The area of circle is 50.272

The area of triangle is 3.0

The area of circle is 50.272