

comments:

they are part of code, but they won't consider in execution.

Two types of comment in python

1. single line comment

```
# my first program
```

2. multi line comment

```
''' ''' or """ """
```

Keywords:

They are the reserved words used for particular task, and they cannot be used as identifiers(variables, function name...etc)

ex: true, false, for, if, else, while, break, try, except, finally,etc

Variables:

It is place to store our values

EX: a=5

"a" is a variable "5" is the value

valid variable declaration:

```
a=5
```

```
A=7
```

```
num = 11
```

```
Num1 = 89
```

```
Num2 = 15
```

```
empid = 123
```

```
emp_name = "Priyanka" or "Priya"
```

```
emp_phno = 9861256188
```

invalid variable declaration:

```
1n = 35
```

```
stu#name@ = "arun"
```

```
stu id = 345
```

Data Types:

it's pre defined component and specify the data category

person data

name = str (alpha)

age = int

phone no = str "bcz we are not performing any calculations so we can store in str instead of int"

place = str

job = str

instaid = str

Mstatus = str

edu = str

salary = float

height = float

weight = float

gender = str

hobbies = str

DOB = str conert to date using libraries

nationality = str

address = str

food = str

fav place = str

Python data types

int = numeric

float = numeric

complex = ex: 5j+7

str = alpha

bool = true or false

Special data types (data structure)

list

tuple

set

dict

in python every line considered as a new line

a=4

b=6

c=7

a=4; b=6; c=7

a,b,c = 4,6,7

Input function: input()

output function: print()

EX:

take a =9 and b =3

```
a = int(input("enter a number:"))
```

```
b = int(input())
```

```
a+b = 12
```

```
a = input("enter a number:")
```

```
b = input()
```

a+b = 93 bcz it will take as a string

```
a = input("enter a number:")
```

```
b = int(input())
```

a+b = error bcz data type is different

Q. write a program to read employee id, employee name, employee phone num

```
emp_id = int(input("Enter employee id:"))
```

```
emp_name = input("Enater employe name:")
```

```
emp_ph = input("Employee Phone Number:")
```

```
print(emp_id, emp_name, emp_ph)
```

Q. read 2 float number from use

```
num1 = float(input("Enter the first number: "))
```

```
num2 = float(input("Enter the second number: "))
```

```
print( num1, "and", num2)
```

```
print(num1+num2)
```

```
print(num1, "+", num2, "=", num1+num2)
```

```
print("sum of:", num1, "+", num2, "=", num1+num2)
```

#.format method

```
print("sum of: {} + {} = {}".format(num1,num2,num1+num2))
```

#fstring method

```
print(f"sum of: {num1} + {num2} = {num1+num2}")
```

#write a program to calculate area of a triangle and circle with given input

```
h = float(input("height of triangle"))
```

```
b = float(input("base of triangle"))
```

```
pie = 3.14
```

```
r = float(input("radius of circle"))
```

```
aot=0.5*b*h
```

```
aoc=3.14*r*r
```

#fstring method

```
print(f"area of triangle is {aot}\n\narea of circle is {aoc}")
```

```
print(f"area of triangle = {0.5*b*h}\narea of circle = {3.14*r*r}")
```