

# assignment 1

## operation

```
In [1]: print("Additon :",1+4+3)
print("Subtraction :",3-1)
print("multiplication :",228*2)
print("Division :",12/3)
print("Division :",6/3) #float disivion
print("Division without remainder :",5//3) #int division
print("Modules :",123%12)
print("Division without remainde:",15//7)
print("Exponential :",2**4)
```

```
Additon : 8
Subtraction : 2
multiplication : 456
Division : 4.0
Division : 2.0
Division without remainder : 1
Modules : 3
Division without remainde: 2
Exponential : 16
```

```
In [2]: import math
print("float Number,PI :",round(math.pi,123456781234521345678))
```

```
float Number,PI : 3.141592653589793
```

```
In [3]: print("Addtion of complex no:",(1+1j)+(123+2j))
print("subtraciomn of complex no:",(1+1j)-(123+2j))
print("multiplication of complex no:",(1+1j)*(123+2j))
print("division of complex no:",(1+1j)/(123+2j))
```

```
Addtion of complex no: (124+3j)
subtraciomn of complex no: (-122-1j)
multiplication of complex no: (121+125j)
division of complex no: (0.008260093834665963+0.007995770831956652j)
```

```
In [4]: a=5
b=4
total=a+b
diff=a-b
product=a*b
division=a/b
int_Division=a//b
Module=a%b
exponential=a**b
print("total=",total,", difference=",diff,", product=",product," modules=",Module
```

```
total= 9 , difference= 1 , product= 20 modules= 1 , division= 1.25 , int Division
1 , EXPONENETil= 625
```

```
In [5]: print("a + b =",total)
print("a - b =",diff)
print("a * b =",product)
```

```
print("a / b =",division)
print("a % b =",Module)
print("a // b =",int_Division)
print("a ** b",expoential)
```

```
a + b = 9
a - b = 1
a * b = 20
a / b = 1.25
a % b = 1
a // b = 1
a ** b 625
```

```
In [6]: number1=4
number2=5
total=number1+number2
diff=number1-number2
product=number1*number2
div=number1/number2
remainder=number1%number2
Int_Division=number1//number2
print("##### operation #####" )
print("addition :",total)
print("Substration :",diff)
print("Multiplication :",product)
print("Division :",division)
print("remainder:",remainder)
print("int_Division:",Int_Division)
```

```
##### operation #####
addition : 9
Substration : -1
Multiplication : 20
Division : 1.25
remainder: 4
int_Division: 0
```

## Q1.Find the area of circle

```
In [7]: import math as m
radius=10
Area_of_circle= m.pi * m.pow(radius,2)
print("Area of the Circle =",round(Area_of_circle,5))
```

Area of the Circle = 314.15927

## Q2.Find the area of Rectangle

```
In [8]: length=100
breath=20
AREA_OF_RECTANGLE=length*breath
print("Area of the rectangle =",AREA_OF_RECTANGLE)
```

Area of the rectangle = 2000

## Q3.Find the area of Rectangle

```
In [12]: mass=73
          gravity=9.81
          weight=mass*gravity
          print("weight =",weight,"Newtons")
```

weight = 716.13 Newtons

## inequalities

```
In [15]: print(3>2)
          print(3>=2)
          print(3<2)
          print(2<3)
          print(3==2)
          print(3!=4)
```

True  
True  
False  
True  
False  
True

## len()

- it is used find the size of variables

```
In [16]: print(len("mahesh") == len("nagaram"))
          print(len("mango") != len("man go"))
          print(len("mango") < len("avocado"))
          print(len("milk") != len("avocado"))
          print(len("milk") == len("meat"))
          print(len("love")== len("like"))
          print(len("python"> len("dragon"))
```

False  
True  
True  
True  
True  
True  
False

```
In [23]: print("True == True :",True == True)
          print("True == False :",True==False)
          print("False == False :",False==False)
          print("True and True :",True and True)
          print("True and False :",True and False)
          print("True or True :",True or True)
          print("False or False :",False or False)
          print("False or True :",False or True)
```

```
True == True : True
True == False : False
False == False : True
True and True : True
True and False : False
True or True : True
False or False : False
False or True : True
```

## AND OR NOT

```
In [26]: print( 3>2 and 4>3 )
print( 3>2 and 4<3 )
print( 3<2 and 4<3 )
print( 3>2 or 4>3 )
print(3>2 or 4<3 )
print( 3<2 or 4<3 )
```

```
True
False
False
True
True
False
```

```
In [28]: print(not True)
```

```
False
```

```
In [30]: print(not False)
```

```
True
```

```
In [31]: print(not not True)
```

```
True
```

```
In [32]: print(not not False)
```

```
False
```

```
In [ ]:
```