(https://www.darshan.ac.in/)

Python Programming - 2101CS405

Lab - 1

01) WAP to print “Hello World”

In [1]:
```
print("hello World")
```

```
hello World
```

02) WAP to print your address i) using single print ii) using multiple print

In [3]:
```
print("kanak nagar 10,\n")
print("sant kabir road,\n")
print("Rajkot")
```

```
kanak nagar 10,

sant kabir road,

Rajkot
```

03) WAP to print addition of 2 numbers (without input function)

In [6]:
```
a=int(10);
b=20;

print("a:%d b:%d" %(a,b) );
print(type(b))
```

```
a:10 b:20
<class 'int'>
```

04) WAP to calculate and print average of 2 numbers (without input function)

In [15]:
```
a=int(10)
b=int(15)
c=float(a+b)/2

print("a:%d b:%d" %(a,b))
print("average is = c:%d" %(c))
```

```
a:10 b:15
average is = c:12
```

05) WAP to add two number entered by user.

In [17]:
```
a=int(input("a:"))
b=int(input("b:"))
```

```
a:10
b:20
```

06) WAP to calculate simple interest.

In [18]:
```
p=int(10)
r=int(20)
t=int(30)

print({(p*r*t)/100})
```

```
{60.0}
```

07) WAP Calculate Area and Circumfrence of Circle

In [25]:
```
r=float(input("radius:"))

Area =({3.14*r*r})
Circumfrence =(2*3.14*r)

print(f'Area: {Area}' )
print(f'circumfrence: {Circumfrence}' )
```

```
radius:5
Area: {78.5}
circumfrence: 31.400000000000002
```

08) WAP to print Multiplication table of given number without using loops.

In [28]:
```
a=int(input("A:"))

print(f'{a}X1 = {a*1}')
print(f'{a}X2 = {a*2}')
print(f'{a}X3 = {a*3}')
print(f'{a}X4 = {a*4}')
print(f'{a}X5 = {a*5}')
print(f'{a}X6 = {a*6}')
print(f'{a}X7 = {a*7}')
print(f'{a}X8 = {a*8}')
print(f'{a}X9 = {a*9}')
print(f'{a}X10 = {a*10}')
```

```
A:10
10X1 = 10
10X2 = 20
10X3 = 30
10X4 = 40
10X5 = 50
10X6 = 60
10X7 = 70
10X8 = 80
10X9 = 90
10X10 = 100
```

09) WAP to calculate Area of Triangle (hint: a = h * b * 0.5)

In [30]:
```
b = int(input("b:"))
h = int(input("h:"))

AT = float(b*h*0.5)

print("Area Of Tringle : %f" %(AT))
```

```
b:10
h:20
Area Of Tringle : 100.000000
```

10) WAP to convert degree to Fahrenheit and vice versa.

In [36]:
```
c = int(input("C:"))
f = int(input("f:"))
F = ((9/5*c)+32)
C = ((32*f-32)*5/9)

print(f"cenlcius to ferenhit : {F}" )
print(f"ferenhit to celcius : {C}" )
```

```
C:5
f:5
cenlcius to ferenhit : 41.0
ferenhit to celcius : 71.11111111111111
```

11) WAP to calculate total marks and Percentage.

In [37]:
```
a=int(input("a:"))
b=int(input("b:"))
c=int(input("c:"))

total = (a+b+c)
ans = float(total*100/300)

print("Percentage of student A : %f" %(ans))
```

```
a:78
b:95
c:64
Percentage of student A : 79.000000
```

12) Compute distance between two points taking input from the user (Pythagorean Theorem).

In [42]:
```
import math
x1 = int(input("x1:"))
x2 = int(input("x2:"))

y1 = int(input("y1:"))
y2 = int(input("y2:"))

distance = math.sqrt(math.pow((x1-x2),2)+math.pow((y1-y2),2))
print(f"distance between two points : {distance}")
```

```
x1:1
x2:2
y1:1
y2:2
distance between two points : 1.4142135623730951
```

13) WAP to convert seconds into hours, minutes & seconds and print in HH:MM:SS

[e.g. 10000 seconds mean 2:46:40 (2 Hours, 46 Minutes, 40Seconds)]

In [47]:
```
import math
sec = int(input("sec:"))

s = sec%60
m = (sec//60) % 60
h = sec//3600

print(h,":",m,":",s)
```

```
sec:10000
2 : 46 : 40
```

14) WAP to enter distance into kilometer and convert it into meter, feet,inches, and centimeter

In [58]:
```
distance = int(input("distance:"))

meter = distance*1000

print("Distance in meter :%f" %(meter),"meter")

feet = meter*3.28084

print("Distance in feet :%f" %(feet),"feet")

inch = meter*39.3701

print("Distance in inches:%f" %(inch),"inch")

smeter = meter*100

print("Distance in Sentimeter :%f" %(smeter),"sentimeter")
```

```
distance:1
Distance in meter :1000.000000 meter
Distance in feet :3280.840000 feet
Distance in inches:39370.100000 inch
Distance in Sentimeter :100000.000000 sentimeter
```