



# 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 [12]: print("(i) a-1 dwarkadham app.,\n satya sai main road,\n infornt of aalap heritage,  
print("(ii) a-1 dwarkadham app.,")  
print("satya sai main road,")  
print("infornt of aalap heritage,")  
print("kalavad road,")  
print("rajkot-360005")  
  
(i) a-1 dwarkadham app.,  
    satya sai main road,  
    infornt of aalap heritage,  
    kalavad road,  
    rajkot-360005  
(ii) a-1 dwarkadham app.,  
    satya sai main road,  
    infornt of aalap heritage,  
    kalavad road,  
    rajkot-360005
```

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

```
In [7]: a=5  
b=6  
print(a+b)
```

11

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

```
In [9]: a=5;b=6
print((a+b)/2)
```

5.5

## 05) WAP to add two number entered by user.

```
In [14]: a=int(input("enter a = "))
b=int(input("enter a = "))
c= a+b
print("sum = ",c)
```

enter a = 5  
enter a = 5  
sum = 10

## 06) WAP to calculate simple interest.

```
In [18]: p=int(input("enter price = "))
r=int(input("enter rate = "))
t=int(input("enter time = "))
print((p*r*t)/100)
```

enter price = 5  
enter rate = 5  
enter time = 1  
0.25

## 07) WAP Calculate Area and Circumference of Circle

```
In [19]: import math

r=int(input("enter radius = "))
pi=math.pi
print("area = ",pi*r*r)
print("circumference = ",2*pi*r)

enter radius = 1
area =  3.141592653589793
circumference =  6.283185307179586
```

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

```
In [22]: i=int(input("enter no. = "))
print(i, " * 1 = ", i*1)
print(i, " * 2 = ", i*2)
print(i, " * 3 = ", i*3)
print(i, " * 4 = ", i*4)
print(i, " * 5 = ", i*5)
print(i, " * 6 = ", i*6)
print(i, " * 7 = ", i*7)
print(i, " * 8 = ", i*8)
print(i, " * 9 = ", i*9)
print(i, " * 10 = ", i*10)
```

```

enter no. = 2
2 * 1 = 2
2 * 2 = 4
2 * 3 = 6
2 * 4 = 8
2 * 5 = 10
2 * 6 = 12
2 * 7 = 14
2 * 8 = 16
2 * 9 = 18
2 * 10 = 20

```

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

```
In [23]: h=int(input("enter height = "))
b=int(input("enter base = "))
print(h*b*0.5)

enter height = 10
enter base = 10
50.0
```

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

```
In [24]: d=int(input("enter degree"))
f=int(input("enter Fahrenheit"))
print("Fahrenheit = ",(d * 9/5) + 32)
print("degree = ",(f - 32) * 5/9.)

enter degree0
enter Fahrenheit32
fahrenheit = 32.0
degree = 0.0
```

## 11) WAP to calculate total marks and Percentage.

```
In [28]: m=int(input("enter mark of m = "))
p=int(input("enter mark of p = "))
c=int(input("enter mark of c = "))
marks=m+p+c
print("total mark = ",marks)
print("percentage = ",marks/3,"%")

enter mark of m = 100
enter mark of p = 100
enter mark of c = 100
total mark = 300
percentage = 100.0 %
```

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

```
In [32]: import math

a = int(input("enter a = "))
b = int(input("enter b = "))
c = math.sqrt(pow(a,2)+pow(b,2))
print(c)
```

```
enter a = 3
enter b = 4
5.0
```

### 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 [38]:

```
import math

s = int(input("enter sec = "))
h = int(s/3600)
m = (s - (3600*h))/60
sec = (m - int(m))*60
print(int(h))
print(int(m))
print(math.ceil(sec))
```

```
enter sec = 10000
2
46
40
```

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

In [40]:

```
km = int(input("enter km = "))
print("meter = ",km*1000)
print("feet = ",km*3280.84)
print("inches = ",km*39370.08)
print("centimeter = ",km*100000)
```

```
enter km = 1
meter = 1000
feet = 3280.84
inches = 39370.08
centimeter = 100000
```

In [ ]: