

Python Programming - 2101CS405

Lab - 1

```
In [ ]: Name : - Vora Yagnik Rajeshbhai  
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```

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 [2]: print("Shapar main road,Shapar Village, Rajkot")
```

Shapar main road,Shapar Village, Rajkot

```
In [3]: print("Shapar main road,")  
print("Shapar village,")  
print("Rajkot")
```

Shapar main road,
Shapar village,
Rajkot

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

```
In [4]: a = 10  
b = 20  
  
print((a+b))
```

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

```
In [5]: a = 10
b = 20

print((a+b)/2)
```

15.0

05) WAP to add two number entered by user.

```
In [6]: a = int(input("Enter number 1:"))
b = int(input("Enter number 2:"))

print(a+b)
```

35

06) WAP to calculate simple interest.

```
In [7]: p = float(input("Enter Amount : "))
r = float(input("Enter Rate : "))
n = float(input("Enter Duration : "))

print("Interest = ",((p*r*n)/100))
```

Interest = 2000.0

07) WAP Calculate Area and Circumfrence of Circle

```
In [8]: r = float(input("Enter Redius :"))

print("Area = ",3.14*r*r)
print("Circumfrence",2*3.14*r)
```

Area = 200.96
Circumfrence 50.24

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

```
In [9]: a = int(input("Enter Number : "))

print(a , "X 1 = " , (a*1))
print(a , "X 2 = " , (a*2))
print(a , "X 3 = " , (a*3))
print(a , "X 4 = " , (a*4))
print(a , "X 5 = " , (a*5))
print(a , "X 6 = " , (a*6))
print(a , "X 7 = " , (a*7))
print(a , "X 8 = " , (a*8))
```

```
print(a , "X 9 = " , (a*9))  
print(a , "X 10 = " , (a*10))
```

```
17 X 1 = 17  
17 X 2 = 34  
17 X 3 = 51  
17 X 4 = 68  
17 X 5 = 85  
17 X 6 = 102  
17 X 7 = 119  
17 X 8 = 136  
17 X 9 = 153  
17 X 10 = 170
```

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

```
In [11]: h = float(input("Enter Height : "))  
b = float(input("Enter Base : "))  
  
print("Area is : ",(h*b*0.5))
```

```
Area is : 12.0
```

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

```
In [13]: d = float(input("Enter degree : "))  
  
print("Fahrenheit : ",(d*9/5)+32)  
  
f = float(input("Enter Fahrenheit : "))  
  
print("Fahrenheit : ",((f-32)*5/9))
```

```
Fahrenheit : 168.8  
Fahrenheit : 76.0
```

11) WAP to calculate total marks and Percentage.

```
In [14]: m1 = float(input("Enter mark-1 : "))  
m2 = float(input("Enter mark-2 : "))  
m3 = float(input("Enter mark-3 : "))  
m4 = float(input("Enter mark-4 : "))  
  
print("Total marks : ",(m1+m2+m3+m4),"\nPercentage : ",(m1+m2+m3+m4)/4)
```

```
Total marks : 343.0  
Percentage : 85.75
```

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

```
In [16]: x1 = float(input("Enter x1 : "))  
x2 = float(input("Enter x2 : "))
```

```

y1 = float(input("Enter y1 : "))
y2 = float(input("Enter y2 : "))

print("Distance from (",x1,"",x2,") to (",y1,"",y2,") : ",((x1-x2)**2+(y1-y2)**2))

```

Distance from (8.0 , 5.0) to (2.0 , 0.0) : 3.605551275463989

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 [31]: s = int(input("Enter seconds : "))

m = (int)(s/60)%60
h = (int)((s/60)/60)
s = s%60
print(h, " Hours, ",m, " Minutes, ",s, " Seconds")

```

2 Hours, 46 Minutes, 40 Seconds

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

```

In [32]: k = float(input("Enter Kilometer : "))

print("Meter : ", k*1000)
print("Feet : ", k*3280.84)
print("Inches : ", k*39370.1)
print("Centimeter : ", k*100000)

```

Meter : 5000.0
 Feet : 16404.2
 Inches : 196850.5
 Centimeter : 500000.0