



## Python Programming - 2101CS405

### Lab - 1

#### 01) WAP to print "Hello World"

```
In [3]: print("Hello World")
```

Hello World

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

```
In [11]: print("Jay Ramani \nGovind Nagar Main Road \nKothariya Road \nRajkot")
```

Jay Ramani  
Govind Nagar Main Road  
Kothariya Road  
Rajkot

```
In [12]: print("Jay Ramani")  
print("Govind Nagar Main Road")  
print("Kothariya Road")  
print("Rajkot")
```

Jay Ramani  
Govind Nagar Main Road  
Kothariya Road  
Rajkot

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

```
In [9]: print(2+5)
```

7

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

```
In [10]: print((5+3)/2)
```

4.0

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

```
In [17]: a = int(input("Enter a: "))
b = int(input("Enter b: "))
sum = a+b;

print("Sum: ", sum)
```

Sum: 7

## 06) WAP to calculate simple interest.

```
In [18]: p = int(input("Enter principal amount: "))
r = float(input("Enter rate: "))
n = int(input("Enter number of years: "))

intrest = p*r*n/100;

print("Intrest: ", intrest)
```

Intrest: 1000.0

## 07) WAP Calculate Area and Circumfrence of Circle

```
In [25]: import math

radius = float(input("Enter radius: "));
area = math.pi*radius*radius
parimiti = 2*math.pi*radius

print("Area: ", area);
print("Circumfrence: ", parimiti)
```

Area: 50.26548245743669  
Circumfrence: 25.132741228718345

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

```
In [27]: table = int(input("Enter number to want multiplication table: "))

print(table,"x", 1,"=", table*1)
print(table,"x", 2,"=", table*2)
print(table,"x", 3,"=", table*3)
print(table,"x", 4,"=", table*4)
print(table,"x", 5,"=", table*5)
print(table,"x", 6,"=", table*6)
print(table,"x", 7,"=", table*7)
print(table,"x", 8,"=", table*8)
print(table,"x", 9,"=", table*9)
print(table,"x", 10,"=", table*10)
```

```
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20
```

## 09) WAP to calculate Area of Triangle (hint: $a = \frac{1}{2}bh$ )

```
In [29]: base = float(input("Enter base: "));
height = float(input("Enter height: "));

area = base*height*0.5

print("Area: ", area)
```

Area: 12.0

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

```
In [34]: celciau = float(input("(1) Enter celcias: "));
faranhit = float(input("(2) Enter faranhit: "));

cToF = 9/5*celciau + 32
fToC = (faranhit - 32) * 5/9

print("\n(1) Celcias to Feranhit: ", cToF, "Feranhit");
print("(2) Feranhit to Celcis: ", fToC, "Celcius");
```

(1) Celcias to Feranhit: 73.4 Feranhit  
(2) Feranhit to Celcis: 23.000000000000004 Celcius

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

```
In [37]: print("All marks enter in 100\n")
math = int(input("Enter marks of Maths: "));
english = int(input("Enter marks of English: "));
physics = int(input("Enter marks of physice: "));
chemistry = int(input("Enter marks of Chemistry: "));

persentage = (math+english+physics+chemistry)/4

print("Persentage: ",persentage)
```

All marks enter in 100

Persentage: 88.0

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

```
In [39]: import math

a = float(input("Enter distance of first side: "));
```

```

b = float(input("Enter distance of second side: "));
firstStep = (a*a) + (b*b)
c = math.sqrt(firstStep);

print("Destance: ", c)

```

Destance: 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 [56]: second = int(input("Enter Second: "));

hours = int(second/3600);
minutes = int(second/60)-(hours*60);
second = second - (hours*3600) - (minutes*60)

print(hours, minutes, second);

```

2 46 40

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

```

In [58]: distance = float(input("Enter distance in KM: "));
meter = distance*1000;
feet = meter * 3.28
inches = feet * 12
centemiter = inches*2.54
print("Meter: ", meter)
print("Feet: ", feet)
print("Inches: ", inches)
print("Centemiter: ", centemiter)

```

Meter: 1000000.0  
 Feet: 3280000.0  
 Inches: 39360000.0  
 Centemiter: 99974400.0

In [ ]: