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# 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 [8]: print("New Shakti Soc. Street-1, \nMarketing Yard Road, \nRajkot-360003 \n \n")
print("New Shakti Soc. Street-1,")
print("Marketing Yard Road,")
print("Rajkot-360003")

New Shakti Soc. Street-1,
Marketing Yard Road,
Rajkot-360003
New Shakti Soc. Street-1,
Marketing Yard Road,
Rajkot-360003
```

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

```
In [11]: a=4
b=23
print("sum:",a+b)
sum: 27
```

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

```
In [12]: a=22
b=28
print("avg:",(a+b)/2)
avg: 25.0
```

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

```
In [13]: a=int(input("Enter Number A:"))
b=int(input("Enter Number B:"))
print("Sum:",a+b)

Enter Number A:23
Enter Number B:25
Sum: 48
```

#### 06) WAP to calculate simple interest.

```
In [15]: P=int(input("Enter Amount:"))
    R=int(input("Enter rate of Intrest:"))
    N=int(input("Enter Number of year:"))

print("interest:",(P*R*N)/100)

Enter Amount:10000
Enter rate of Intrest:5
Enter Number of year:3
interest: 1500.0
```

### 07) WAP Calculate Area and Circumfrence of Circle

```
In [19]: r=int(input("Enter radius of Circle:"))
             print("Enter Area of Circle:",(3.14*r*r))
             print("Circumfrence of Circle: ",2*(3.14*r))
             Enter radius of Circle:5
             Enter Area of Circle: 78.5
             Circumfrence of Circle: 31.40000000000002
             ### 08) WAP to print Multiplication table of given number without using loops.
In [24]: A=int(input("Enter a 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 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)
             Enter a Number:3
             3 \quad X \quad 1 = 3
             3 X 2 = 6
             3 X 3 = 9
            3 \quad X \quad 4 = 12
                X 5 = 15
             3 \times 6 = 18
            3 X 7 = 21
             3 X 8 =
                            24
             3 \times 9 = 27
             3 X 10 = 30
```

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

```
In [25]: h=int(input("enter a number:"))
b=int(input("enter a number:"))
print("Area of Triangle:",h*b*0.5)

enter a number:2
enter a number:3
Area of Triangle: 3.0
```

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

```
In [27]: c=float(input("Enter Degree:"))
    print("Fahrenheit",(c*9/5)+32)
    f=float(input("enter Fahrenhit:"))
    print("Degree:",(f-32)*5/9)

Enter Degree:0
    Fahrenheit 32.0
    enter Fahrenhit:32
    Degree: 0.0
```

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

```
In [29]: phy=int(input("Enter Physics marks:"))
    mat=int(input("Enter Maths marks:"))
    che=int(input("Enter Chemistry marks:"))

print("Total Marks:",phy+mat+che)

print("Percentage:",(phy+mat+che)/3,"%")

Enter Physics marks:82
    Enter Maths marks:78
    Enter Chemistry marks:80
    Total Marks: 240
    Percentage: 80.0 %
```

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

```
In [34]: import math
    ab=int(input("enter A to B distance:"))
    bc=int(input("enter B to c distance:"))
    print("A to C :", math.sqrt((ab*ab)+(bc*bc)))

enter A to B distance:7
    enter B to c distance:24
    A to C : 25.0
```

# 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 [1]: ss=int(input("Enter Seconds:"))
    mm=0
    hh=0
    while(ss>3600):
        ss-=3600
        hh+=1
    while(ss>60):
        ss==60
        mm+=1
    print(hh,":",mm,":",ss)
Enter Seconds:10000
2 : 46 : 40
```

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

```
In [3]: Km=int(input("enter Kilometer:"))
    print("Meters:",Km*1000)
    print("Feets:",Km*3280.8399)
    print("Inches:",Km*39370.0787)
    print("centimeter:",Km*100000)

    enter Kilometer:1
    Meters: 1000
    Feets: 3280.8399
    Inches: 39370.0787
    Meter: 100000
In []:
```