



(<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("laxmanzula society,150 ft ring road,rajkot");  
  
print("laxmanzula society",end="," );  
print("150 ft ring road",end="," );  
print("rajkot");
```

laxmanzula society,150 ft ring road,rajkot
laxmanzula society,150 ft ring road,rajkot

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

```
In [3]: a=3;  
b=5;  
sum=a+b;  
print("sum:",sum);
```

sum: 8

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

```
In [4]: a=10;  
b=13;  
avg=a+b/2;  
print("avg:",avg);
```

avg: 6.5

05) WAP to add two number entered by user.

```
In [1]: a=int(input("emter no1:"));  
b=int(input("emter no2:"));  
sum=a+b;  
print("sum:",sum);
```

emter no1:4
emter no2:5
sum: 9

06) WAP to calculate simple interest.

```
In [2]: p=int(input("enter principal amount:"));
t=int(input("enter time:"));
r=int(input("enter rate of intrest:"));
i=p*t*r;
print("interest:",i);
```

```
enter principal amount:8
enter time:9
enter rate of intrest:30
interest: 2160
```

07) WAP Calculate Area and Circumference of Circle

```
In [1]: r=int(input('enter radius:'));
area=3.14*r*r;
circumference=2*3.14*r;
print('area:',area);
print("circumference:",circumference);
```

```
area: 50.24
circumference: 25.12
```

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

```
In [5]: a=int(input('enter radius:'));
print("table of ",a);
print(a,"*", "1", "=",a*1);
print(a,"*", "2", "=",a*2);
print(a,"*", "3", "=",a*3);
print(a,"*", "4", "=",a*4);
print(a,"*", "5", "=",a*5);
print(a,"*", "6", "=",a*6);
print(a,"*", "7", "=",a*7);
print(a,"*", "8", "=",a*8);
print(a,"*", "9", "=",a*9);
print(a,"*", "10", "=",a*10);
```

```
enter radius:5
table of 5
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
5 * 9 = 45
5 * 10 = 50
```

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

```
In [3]: h=int(input("enter h:"))
b=int(input("enter b:"))
print('area of triangle is:',h*b*0.5)
```

```
enter h:6
enter b:8
area of triangle is: 24.0
```

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

```
In [4]: #fahrenheit to celsius
F=int(input("enter fahrenheit: "))
C=(F-32)*(5/9);
print("in degree celcius:",C)

#celcius to fahrenheit
C=int(input("enter celcius:"))
F=(1.8*C)+32
print("in Fahrenheit:",F)
```

```
enter fahrenheit: 6
in degree celcius: -14.444444444444445
enter celcius:4
in Fahrenheit: 39.2
```

11) WAP to calculate total marks and Percentage.

```
In [2]: sub1=int(input("enter sub1 marks:"))
sub2=int(input("enter sub2 marks:"))
sub3=int(input("enter sub3 marks:"))
sub4=int(input("enter sub4 marks:"))
sub5=int(input("enter sub5 marks:"))
total=sub1+sub2+sub3+sub4+sub5
#total mark is 350 (per subject 70 marks)
per=(total/350)*100
print("total marks:",total)
print("percentage:",per,"%")
```

```
enter sub1 marks:66
enter sub2 marks:58
enter sub3 marks:55
enter sub4 marks:61
enter sub5 marks:70
total marks: 310
percentage: 88.57142857142857 %
```

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

```
In [6]: x1=int(input("enter x1:"))
x2=int(input("enter x2:"))
y1=int(input("enter y1:"))
y2=int(input("enter y2:"))
distance=((x2-x1)**2+(y2-y1)**2)**0.5
print("distance:",distance)
```

```
enter x1:6
enter x2:3
enter y1:5
enter y2:2
distance: 4.242640687119285
```

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 [13]: sec=int(input("enter seconds:"))
hours=sec//3600
minutes=(sec%3600)//60
seconds=(sec%3600)%60
print(hours,minutes,seconds,sep=":")
```

```
enter seconds:10000
2:46:40
```

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

```
In [2]: km=int(input("give distance in kilometer"))
meter=km*100
cm=km*100000
ft=km*3280.84
Inch=km*39370.1
print("meter:",meter)
print("Feet:",ft)
print("Inch",Inch)
print("Centimeter:",cm)
```

```
give distance in kilometer5
meter: 500
Feet: 16404.2
Inch 196850.5
Centimeter: 500000
```

```
In [ ]:
```