



# Python Programming - 2301CS404

## Lab - 1

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

```
In [12]: print('Hello World')
```

Hello World

### 02) WAP to print addition of two numbers with and without using input().

```
In [3]: #without input
a,b=4,6
print(a+b)

#with input
a = int(input('Enter first number'))
b = int(input('Enter second number'))
print(a+b)
```

10  
Enter first number5  
Enter second number5  
10

### 03) WAP to check the type of the variable.

```
In [11]: print(type('abc'))
print(type(3))
print(type(3.745))
```

```
<class 'str'>
<class 'int'>
<class 'float'>
```

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

```
In [18]: p = 500
r = 0.04
t = 2

ans = (p*r*t)/100
print(ans)
```

0.4

#### 05) WAP to calculate area and perimeter of a circle.

```
In [17]: r = float(input('Enter Radius Of Circle'))
print(3.14*r*r)
print(2*3.14*r)
```

Enter Radius Of Circle1  
3.14  
6.28

#### 06) WAP to calculate area of a triangle.

```
In [16]: b = float(input('Enter value of base'))
h = float(input('Enter value of height'))
print(0.5*b*h)
```

Enter value of base3  
Enter value of height2  
3.0

#### 07) WAP to compute quotient and remainder.

```
In [1]: a = int(input('Enter the number'))
print(a/10)
print(a%10)
```

1  
0.1

#### 08) WAP to convert degree into Fahrenheit and vice versa.

```
In [14]: fah=0;
cel = int(input("Enter celcius:"))
fah = (9/5)*cel +32;
print("Fahrenheit is:", fah)

fah = int(input("Enter Fahrenheit:"))
```

```
cel = (fah-32)*(5/9)
print("Celcius is:",cel)
```

Fahrenheit is: -0.3999999999999986

Celcius is: -1.1111111111111112

## 09) WAP to find the distance between two points in 2-D space.

```
In [1]: import math
x1=float(input("enter x1"))
y1=float(input("enter y1"))
x2=float(input("enter x2"))
y2=float(input("enter y2"))
distance=math.sqrt(pow((x2-x1),2)+pow((y2-y1),2))
print(f"the distance is {distance}")
```

the distance is 1.4142135623730951

## 10) WAP to print sum of n natural numbers.

```
In [2]: num = int(input("Enter Range:"))
total=0;
for i in range(1,num+1):
    total=total+i
print(total)
```

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## 11) WAP to print sum of square of n natural numbers.

```
In [3]: num = int(input("Enter Range:"))
total=0;
for i in range(1,num+1):
    total=total+(i*i)
print(total)
```

14

## 12) WAP to concate the first and last name of the student.

```
In [19]: firstname = input('Enter First name')
lastname = input('Enter Last name')
print(firstname+lastname)
```

Enter First namerutvik

Enter Last namebhagiya

rutvikbhagiya

## 13) WAP to swap two numbers.

```
In [15]: a = input('Enter First Number')
b = input('Enter second Number')
print('before swapped',a,b)
```

```
temp = a
a = b
b = temp
print('After swapped',a,b)
```

Enter First Number5  
Enter second Number2  
before swapped 5 2  
After swapped 2 5

#### 14) WAP to get the distance from user into kilometer, and convert it into meter, feet, inches and centimeter.

```
In [3]: kilometer = float(input("Enter Kilometer:"))
meter = kilometer * 1000
feet = kilometer * 3280.84
inch = kilometer * 39370.1
centimeter = kilometer * 100000

print("Meter: ",meter)
print("Feet: ",feet)
print("Inch: ",inch)
print("Centimeter: ",centimeter)
```

Meter: 10000.0  
Feet: 32808.4  
Inch: 393701.0  
Centimeter: 1000000.0

#### 15) WAP to get day, month and year from the user and print the date in the given format: 23-11-2024.

```
In [6]: day = input("Enter Day:")
month = input("Enter Month:")
year = input("Enter Year:")

print(day,"-",month,"-",year)
```

10 - 10 - 10