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Python Programming - 2101CS405

Lab - 1

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01) WAP to print "Hello World"

```
In [1]: print("hello world");
```

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

```
In [10]: print("sahkar socity street no 2 rajkot",end=",");
         print("sahkar socity");
         print("street no 2",end=",");
         print("rajkot");
```

sahkar socity street no 2 rajkot, sahkar socity street no 2, rajkot

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

```
a=int(input("Enter a first number : "));
In [6]:
        b=int(input("Enter a second number : "));
        print(f"Addition is {a+b}")
        Enter a first number: 19
```

Enter a second number: 1 Addition is 20

hello world

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

```
In [8]: a=int(input("Enter a first number : "));
b=int(input("Enter a second number : "));
print(f"average is {(a+b)/2}")

Enter a first number : 10
Enter a second number : 20
average is 15.0
```

05) WAP to add two number entered by user.

```
In [ ]: a=int(input("Enter a first number : "));
b=int(input("Enter a second number : "));
print(f"Addition is {a+b}")
```

06) WAP to calculate simple interest.

```
In [14]: p=float(input("Enter a p : "));
    r=float(input("Enter a r : "));
    n=float(input("Enter a n : "));
    print(f"simple interest is ",(p*r*n)/100)

Enter a p : 10
    Enter a r : 20
    Enter a n : 30
    simple interest is 60.0
```

07) WAP Calculate Area and Circumfrence of Circle

```
In [16]: import math
    r=float(input("enter radius : "))
    print(f"Area of circle is {math.pi*r*r}")

enter radius : 1
    Area of circle is 3.141592653589793
```

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

```
In [23]:
          num=int(input("enter table number : "))
           print(f''\{num\} X 1 = \{num*1\}'')
           print(f''(num) X 2 = {(num*2)}'')
           print(f''\{num\} X 3 = \{num*3\}'')
           print(f''\{num\} X 4 = \{num*4\}'')
           print(f''\{num\} X 5 = \{num*5\}'')
           print(f''\{num\} X 6 = \{num*6\}'')
           print(f''\{num\} X 7 = \{num*7\}'')
           print(f''\{num\} \times 8 = \{num*8\}'')
           print(f''\{num\} X 9 = \{num*9\}'')
           print(f''\{num\} X 10 = \{num*10\}'')
           enter table number : 5
           5 X 1 = 5
           5 X 2 = 10
           num X 3 = 15
           num X 4 = 20
           num \ X \ 5 = 25
           num \ X \ 6 = 30
           num \ X \ 7 = 35
           num \ X \ 8 = 40
           num \ X \ 9 = 45
           num \ X \ 10 = 50
```

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

```
In [28]: h=float(input("enter h number : "))
b=float(input("enter b number : "))
print(f"Area of triangle is {h*b*0.5}")

enter h number : 10
enter b number : 20
Area of triangle is 100.0
```

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

```
In [30]: # °F = (9/5 × °C) + 32.7
    cel=float(input("enter celecius : "))
    print(f"ferenheit is {((9/5)*cel)+32.5}")
    # C = 5/9(F-32)
    fer=float(input("enter ferenheit : "))
    print(f"celcius is {((5/9)*(fer-32))}")

enter celecius : 1
    ferenheit is 34.3
    enter ferenheit : 34.3
    celcius is 1.2777777777763
```

11) WAP to calculate total marks and Percentage.

```
maths=int(input("enter maths marks :"))
In [34]:
         sci=int(input("enter science marks :"))
         che=int(input("enter chemistry marks :"))
         phy=int(input("enter physics marks :"))
         print(f"total marks is {(maths+sci+che+phy)}")
         print(f"precentage is {(maths+sci+che+phy)/4}")
         enter maths marks :10
         enter science marks :10
         enter chemistry marks :10
         enter physics marks :10
         total marks is 40
         precentage is 10.0
```

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

```
In [35]: import math
         a=int(input("enter a :"))
         b=int(input("enter b :"))
         print(f"distance between two points is {math.sqrt((a*a)+(b*b))}")
         enter a :3
         enter b:4
         distance between two points is 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 [40]:
        second=int(input("Enter Second :"))
         hour=(int)(second/3600)
         minute=(int)((second-hour*3600)/60)
         second=(int)((second)-(hour*3600)-minute*60)
         print(f"{hour}:{minute}:{second}")
         Enter Second :10000
```

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

2:46:40

```
In [41]: distence=float(input("Enter distence in kilometer"))
    print(f"Distence in meter is {distence*1000}")
    print(f"Distence in feet is {distence*3281}")
    print(f"Distence in inch is {distence*39370.1}")
    print(f"Distence in centimeter is {distence*100000}")
Enter distence in kilometer10
```

Enter distence in kilometer10 Distence in meter is 10000.0 Distence in feet is 32810.0 Distence in inch is 393701.0 Distence in centimeter is 1000000.0

In []: