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Python Programming - 2301CS404

Lab - 1

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0.0.1 01) WAP to print "Hello World"

```
[1]: print("Hello World")
```

```
Hello World
```

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

```
[3]: a = 23
     b = 67
     print(a,"+",b,"=",a+b)
     a = int(input("Enter the first Number:"))
     b = int(input("Enter the Second Number:"))
     print(a,"+",b,"=",a+b)
```

```
23 + 67 = 90
Enter the first Number: 89
Enter the Second Number: 09
89 + 9 = 98
```

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

```
[9]: a = 89
     b = 8.9
     str = "tempString"
     print("type of a",type(a))
     print("type of b",type(b))
     print("type of str",type(str))
```

```
type of a <class 'int'>
type of b <class 'float'>
type of str <class 'str'>
```

0.0.4 04) WAP to calculate simple interest.

```
[13]: p = int(input("Enter the total Amount:"))
      n = int(input("Enter the time Period:"))
      r = int(input("Enter the rate of Interest:"))
      i = float((p*n*r)/100)
      print("simple interest:",i)
```

```
Enter the total Amount: 1000
Enter the time Period: 10
Enter the rate of Interest: 10
simple interest: 1000.0
```

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

```
[24]: import math
      r = int(input("Enter the radius of the Circle:"))
      perimeter = 2*math.pi*r
      area = math.pi*r*r
      print("area =",perimeter)
      print("area =",area)
```

```
Enter the radius of the Circle: 7
area = 43.982297150257104
area = 153.93804002589985
```

0.0.6 06) WAP to calculate area of a triangle.

```
[26]: b = int(input("Enter the base:"))
      h = int(input("Enter the height:"))
      area = b*h*0.5
      print("area =",area)
```

```
Enter the base: 3
Enter the height: 6
area = 9.0
```

0.0.7 07) WAP to compute quotient and remainder.

```
[31]: a = int(input("Enter the number:"))
      b = int(input("the number is divide by:"))
      quotient = a/b
      remainder = a%b
      print("quotient =",quotient)
      print("remainder =",remainder)
```

```
Enter the number: 10
the number is divide by: 8
```

```
quotient = 1.25
remainder = 2
```

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

```
[36]: f = float(input("Enter the temprature in Fahrenheit:"))
      c = ((f-32)*5)/9
      print("temprature in degree:",c)

      c = float(input("Enter the temprature in degree:"))
      f = ((c*9)/5)+32
      print("temprature in Fahrenheit:",f)
```

```
Enter the temprature in Fahrenheit: 32
temprature in degree: 0.0
Enter the temprature in degree: 0
temprature in Fahrenheit: 32.0
```

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

```
[42]: import math
      x1,y1 = 5,6
      x2,y2 = 8,9
      distance = math.sqrt(math.pow((x1-x2),2)+math.pow((y1-y2),2))
      print("distance :",distance)
```

```
distance : 4.242640687119285
```

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

```
[60]: n = int(input("Enter the value of n :"))
      sum = (n*(n+1))/2
      print("sum :",sum)
```

```
Enter the value of n : 10
sum : 55.0
```

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

```
[56]: n = int(input("Enter the value of n :"))
      sum = (n*(n+1)*(2*n+1))/6
      print("sum :",sum)
```

```
Enter the value of n : 3
sum : 14.0
```

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

```
[66]: fn = "Vishal"
      ln = "Baraiya"
      res = fn+" "+ln
      print(res)
```

Vishal Baraiya

0.0.13 13) WAP to swap two numbers.

```
[68]: a = 23
      b = 87
      temp = a
      a = b
      b = temp
      print("a =",a)
      print("b =",b)
```

a = 87
b = 23

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

```
[70]: d = int(input("Enter the distence in km :"))
      print("in meters :",d*1000)
      print("in feet :",d*3281)
      print("in inches :",d*39370.1)
      print("in cm",d*1000*100)
```

Enter the distence in km : 10
in meters : 10000
in feet : 32810
in inches : 393701.0
in cm 1000000

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

```
[78]: d = int(input("Enter the day :"))
      m = int(input("Enter the month :"))
      y = int(input("Enter the year :"))
      print(d,"-",m,"-",y,sep="",end="\n")
```

Enter the day : 8
Enter the month : 9

```
Enter the year : 2024
8-9-2024
```

[ ]: