Assignment 1.2 [input statement and operators]

1. Write a python program to take a input in uppercase and change it to lower case.

Code:-

```
ch=input("Enter characters in uppercase: ")
print("Lowercase of given character is ",ch.lower())
```

O/p:-

```
Enter characters in uppercase: WE ARE NUMBER ONE
Lowercase of given character is  we are number one
```

2. Write a python program to input the radius of a circle and print its area and perimeter.

Code:-

```
rad=float(input("Enter radius of circle: "))
area=3.14*rad*rad
peri=2*3.14*rad
print("Area of circle: ",area,"\nPerimeter of circle: ",peri)
```

O/p:-

```
Enter radius of circle: 5.5
Area of circle:  94.985
Perimeter of circle:  34.54
```

3. Write a python program to input marks in 5 subjects of a student and print its average mark.

Code:-

```
m= float(input("Enter mark of maths subject: "))
e= float(input("Enter mark of english subject: "))
ss= float(input("Enter mark of social science subject: "))
sc= float(input("Enter mark of science subject: "))
cs= float(input("Enter mark of computer subject: "))
sum=m+e+ss+sc+cs
avg=sum/5
print("Average mark: ",avg)
```

O/p:-

```
Enter mark of maths subject: 86
Enter mark of english subject: 90
Enter mark of social science subject: 92
Enter mark of science subject: 95
Enter mark of computer subject: 85
Average mark:  89.6
```

4. Write a python program to input a number and print its square, cube and fourth power.

Code:-

```
num=int(input("Enter a number: "))
print("Square of given number: ",pow(num,2),
    "\nCube of given number: ",pow(num,3),
    "\nFourth of given number: ",pow(num,4))
```

O/p:-

```
Enter a number: 4
Square of given number:  16
Cube of given number:  64
Fourth of given number:  256
```

5. Write a python program to input the sides of a triangle and print its area.

Code:-

```
a=float(input("Enter first side of a triangle: "))
b=float(input("Enter second side of a triangle: "))
c=float(input("Enter third side of a triangle: "))
s=(a+b+c)/2
area=(s*(s-a)*(s-b)*(s-c)) ** 0.5
print("Area of triangle: ",area)
```

O/p:-

```
Enter first side of a triangle: 5
Enter second side of a triangle: 6
Enter third side of a triangle: 7
Area of triangle:  14.696938456699069
```

6. Write a python program to compute SI and CI.

Code:-

```
p=float(input("Enter the principal amount: "))
r=float(input("Enter the rate of interest: "))
t=float(input("Enter the time: "))
SI=(p*r*t)/100
CI=p*(1+r/100)**t - p
print("Simple Interest: ",SI,"\nCompound Interest: ",CI)
```

O/p:

```
Enter the principal amount: 5000
Enter the rate of interest: 2
Enter the time: 15
Simple Interest:  1500.0
Compound Interest:  1729.3416916206495
```

7. Ask the user to enter a number x. Use the sep optional argument to print out x, 2x, 3x, 4x,and 5x, each separated by three dashes, like below.

   Enter a number: 7

   7---14---21---28---35

   Code:-

```
n=int(input("Enter a number: "))
print((n*1),(n*2),(n*3),(n*4),(n*5),sep='---')
```

   O/p:-

```
Enter a number: 6
6---12---18---24---30
```