9.1 - WAP to calculate simple intrest using function.

```
def SI(p,r,t):
    si = (p * r * t)/100
    return si
p=int(input("Enter P:"))
r=int(input("Enter R:"))
t=int(input("Enter T:"))
print("Answer is :",SI(p,r,t))
```

```
Answer is : 10.0
```

9.2 - WAP that defines a function to add first N numbers.

```
# 2) WAP That defines a function to add first n numbers.

def addn(n):
    sumn = 0
    for i in range(n+1):
        sumn = sumn + i
    return sumn

n = int(input("Enter n: "))

print("Ans is :: ",addn(n))
```

```
Ans is ::  15
```

9.3 - WAP to find the maximum number from two given numbers

```
a = int(input("Enter the first number: "))
b = int(input("Enter the second number: "))
maximum = max(a, b)
print("The maximum number is : ",maximum)


#Enter the first number: 10
#Enter the second number: 25
```

```
#The maximum number is: 25

# def mxmi(a,b):
#     if a>b:
#         return a
#     else:
#         return b
# n1 = int(input("Enter first num: "))
# n2 = int(input("Enter second num: "))
# print("The maximum number is:",mxmi(n1, n2))

The maximum number is :  20
```

9.4 - WAP to take a string from the user and pass it as an argument and convert all lowercase characters into uppercase using a function.

```
def to_upper(s):
    return s.upper()

n = input("Enter a string: ")
print("String in uppercase:", to_upper(n))

#Enter a string: Hello World
#String in uppercase: HELLO WORLD

String in uppercase: HELLO WORLD
```

9.5 -WAP to find factoraial of given number using function.

```
def fact(n):
    fact = 1
    for i in range(1, n+1):
        fact = fact * i
    return fact
n = int(input("Enter n: "))
print("factoraial is :: ",fact(n))


factoraial is ::  120
```

9.6 - WAP to genrate fibonaci series using a function.

```
def fibo(n):
    a = 0
    b = 1
    temp = 0
    for i in range(n):
        print(temp)
        a = b
        b = temp
        temp = a + b

n = int(input("Enter n: "))
fibo(n)
```

```
0
1
1
2
3
```

9.7 - WAP to impliment a simple calculater using lambda function.

```
calc = lambda a, exp, b: a+b if(exp == "+") else a-b if (exp =="-")
else a*b if(exp == "*") else a/b if(exp == "/") else "Enter valid exp"

a = int(input("Enter a ::"))
b = int(input("Enter b ::"))
exp = input("Enter exp (+,-,*,/) :: ")
print("Ans is ::", calc(a,exp, b))
```

```
Ans is :: 30
```

9.8 - WAP to that defined a function that return 1 if the number is prime oterwise return 0.

```
def is_prime(n):
    if n <= 1:
        return 0
    for i in range(2, n):
        if n % i == 0:
```

```
            return 0
    return 1
num = int(input("Enter a number: "))
print("Return is:",is_prime(num))
# Enter a number:10
# Return is: 0
```

```
Return is: 0
```

9.9 - WAP to find a factorial of given number using recursion.

```
def factR(n):
    if n==1:
        return n
    else:
        return n*factR(n-1)
n1=int(input("Enter num:"))
print("Answer is :",factR(n1))
```

```
Answer is : 120
```

9.10 - WAP to genrate fibonaci series using a recurion.

```
def fiboR(n):
    if n<=1:
        return n
    else:
        return (fiboR(n-1) + fiboR(n-2))
n1=int(input("Enter num:"))
print("Answer is :")
for i in range(n1):
    print(fiboR(i),end=" ")
```

```
Answer is :
0 1 1 2 3 5 8 13 21 34
```