1. Find the compound interest for the given p,n,r (formula : p(1+n*r/100) n)

```
p,n,r= [int(x) for x in input("enter p,n and r:").split()]
print("compound interest is:",p*(pow((1+r/100),n)))
```

```
enter p,n and r:1000 10 2
compound interest is: 1218.9944199947574
```

2. Convert centegrade to farenheit (f= 9/5*c+32)

```
c = float(input("Enter centegrade:"))
print(c,"centegrade in farenhite is",9/5*c+32)
```

```
Enter centegrade:-4
-4.0 centegrade in farenhite is 24.8
```

3. Find the greater of two nos

```
a,b = [ int(x) for x in input("enter two number:").split()]
print(a," is greater than",b) if (a>b) else print(b,"is greater than",a)
```

```
enter two number:3 4
4 is greater than 3
```

4. Write a program for finding surface areas of cylinder and cone (2*PI*rrh,1/3*PI*rrh) using function.

```
import math
def SArea(r,h):
    print("surface area of cylinder is:",2*math.pi*r*r*h)
    print("surface area of cone is:",1/3*math.pi*r*r*h)
r,h = [ int(x) for x in input("enter radius and height:").split()]
SArea(r,h)
```

```
enter radius and height:4 5
surface area of cylinder is: 502.6548245743669
surface area of cone is: 83.7758040957278
```

5. Find the greatest of four nos (using ‘and’ operator) using function.

```
def greatest(a,b,c,d):
    if a>b and a>c and a>d:
        print(a,"is the greatest number")
    elif b>c and b>d:
        print(b,"is the greatest number")
    elif c>d:
        print(c,"is the greatest number")
    else:
        print(d,"is the greatest number")
a,b,c,d=[int(x) for x in input("enter 4 nymbers:").split()]
greatest(a,b,c,d)
```

```
enter 4 nymbers:5 4 3 2
5 is the greatest number
```

6. Write a menu program to perform the operations (ODDorEven, Factorial,ODDNoUptoN, PrimeUptoN) using functions for two nos with menu choice

```
def ODDorEven(n):
    print(n,"is even\n") if n%2==0 else print(n,"is odd\n")

def Factorial(n):
    if(n==1 or n==0):
        return 1
    f=n*Factorial(n-1)
    return f

def ODDNoUptoN(n):
    for i in range(1,n+1,2):
        print(i,end=" ")

def PrimeUptoN(n):
    print("the prime numbers upto",n,"are:")
    for num in range(1,n + 1):
        if num > 1:
```

```
            for i in range(2,num):
                if (num % i) == 0:
                    break
            else:
                print(num,end=" ")

ch=0
while ch!=5:
    print("\n\nMENU\n1.ODDorEven\n2.Factorial\n3.ODDNoUptoN\n4.PrimeUptoN\n5.Exit")
    ch= int(input("enter your choice:"))
    if ch!=5:
        n=int(input("enter value of n:"))
    if ch==1:ODDorEven(n)
    elif ch==2:print("factorial of",n,"is ",Factorial(n))
    elif ch==3:ODDNoUptoN(n)
    elif ch==4:PrimeUptoN(n)
    elif ch==5:print("exiting  ")
    else:
        print("enter valid number")
        ch=0
print("BYE")
```

```
MENU
1.ODDorEven
2.Factorial
3.ODDNoUptoN
4.PrimeUptoN
5.Exit
enter your choice:1
enter value of n:5
5 is odd



MENU
1.ODDorEven
2.Factorial
3.ODDNoUptoN
4.PrimeUptoN
5.Exit
enter your choice:2
enter value of n:5
factorial of 5 is  120


MENU
2.Factorial
3.ODDNoUptoN
4.PrimeUptoN
5.Exit
enter your choice:3
enter value of n:9
1 3 5 7 9

MENU
1.ODDorEven
2.Factorial
3.ODDNoUptoN
4.PrimeUptoN
5.Exit
enter your choice:4
enter value of n:21
the prime numbers upto 21 are:
2 3 5 7 11 13 17 19

MENU
1.ODDorEven
2.Factorial
3.ODDNoUptoN
4.PrimeUptoN
5.Exit
```