

- Find the compound interest for the given p,n,r (formula :  $p(1+n)^t$ )

```
def compound_interest(principle, rate, time):  
    CI = principle * (pow((1 + rate / 100), time))  
    print("Compound interest is", CI)  
p=int(input("enter p value: "))  
n=int(input("enter n value: "))  
r=float(input("enter r value: "))  
compound_interest(p, r, n)
```

```
☞ enter p value: 1200  
   enter n value: 2  
   enter r value: 5.4  
   Compound interest is 1333.0992
```

- Convert centegrade to farenheit (  $f = 9/5 * c + 32$  )

```
celsius = float(input("Enter temperature in celsius: "))  
fahrenheit = (celsius * 9/5) + 32  
print('%.2f Celsius is: %.2f Fahrenheit' %(celsius, fahrenheit))
```

```
☞ Enter temperature in celsius: 37  
   37.00 Celsius is: 98.60 Fahrenheit
```

- Find the greater of two nos

```
a=int(input("enter a num : "))  
b=int(input("enter a num : "))  
print("greater num is : ")  
if(a>b):  
    print(a)  
else:  
    print(b)
```

```
☞ enter a num : 10  
   enter a num : 100  
   greater num is :  
   100
```

- Write a program for finding surface areas of cylinder and cone

```

import math
def Cylinder(r,h):
    return 2*math.pi*r*r*h
def cone(r,h):
    return (1/3)*math.pi*r*r*h
r=int(input("enter r value : "))
h=int(input("enter h value"))
print("surface area of cylinder is : %.2f"%Cylinder(r,h))
print("surface area of cone is : %.2f "%cone(r,h))

```

```

❏ enter r value : 5
   enter h value3
   surface area of cylinder is : 471.24
   surface area of cone is : 78.54

```

## ▼ Find the greatest of four nos ( using 'and' operator) using function

```

a=int(input("enter 1st num: "))
b=int(input("enter 2nd num: "))
c=int(input("enter 3rd num: "))
d=int(input("enter 4th num: "))
print("greater num is : ")
if(a>b and a>c and a>d):
    print(a)
elif(b>c and b>d):
    print(b)
elif(c>d):
    print(c)
else:
    print(d)

```

```

❏ enter 1st num: 5
   enter 2nd num: 8
   enter 3rd num: 7
   enter 4th num: 9
   greater num is :
   9

```

## ▼ Write a menu program to perform the operations ( ODDorEven, PrimeUptoN ) using functions for two nos with menu choice

```

loop = 1
choice = 0

def oddoreven(a):

```

```

if(a%2==0):
    print("even")
else:
    print("odd")
def fact(num):
    factorial=1
    if num < 0:
        print("Sorry, factorial does not exist for negative numbers")
    elif num == 0:
        print("The factorial of 0 is 1")
    else:
        for i in range(1,num + 1):
            factorial = factorial*i
        print("The factorial of",num,"is",factorial)
def odd(n):
    print("odd numbers: ");
    for i in range(1,n+1):
        if(i%2!=0):
            print(i)
def prime(l,h):
    print("prime numbers: ")
    for num in range(l,h + 1):
        if num > 1:
            for i in range(2,num):
                if (num % i) == 0:
                    break
            else:
                print(num)

while loop == 1:
    print ("Welcome")
    print ("your options are:")
    print ("")
    print("1) odd or even")
    print("2) factorial")
    print("3) odd upto n")
    print("4) prime upto n")
    print("5) Quit ")
    print("")
    try:
        choice = int(input("Choose your option: "))
    except:
        print('please enter a valid number for option')
        print("")
    print("")
    if choice == 1:
        x = int(input(" Enter  no: "))
        oddoreven(x)

    elif choice == 2:
        x = int(input("Enter  no: "))
        fact(x)

```

```
    return
```

```
elif choice == 3:
    x = int(input("Enter range: "))
    odd(x)

elif choice == 4:
    x = int(input("Enter lower range: "))
    y = int(input("Enter upper range: "))
    prime(x,y)

elif choice == 5:
    loop = 0

else:
    print("please choice a valid option from 1 to 5")
    choice=0
print ("Thank-you ")
```



Welcome  
your options are:

- 1) odd or even
- 2) factorial
- 3) odd upto n
- 4) prime upto n
- 5) Quit

Choose your option: 1

Enter no: 10  
even  
Welcome  
your options are:

- 1) odd or even
- 2) factorial
- 3) odd upto n
- 4) prime upto n
- 5) Quit

Choose your option: 2

Enter no: 5  
The factorial of 5 is 120  
Welcome  
your options are:

- 1) odd or even
- 2) factorial
- 3) odd upto n
- 4) prime upto n
- 5) Quit

Choose your option: 3

Enter range: 10  
odd numbers:  
1  
3  
5  
7  
9  
Welcome  
your options are:

- 1) odd or even
- 2) factorial
- 3) odd upto n
- 4) prime upto n
- 5) Quit

Choose your option: 4

Enter lower range: 1  
Enter upper range: 10

prime numbers:

2

3

5

7

Welcome

your options are:

1) odd or even

2) factorial

3) odd upto n

4) prime upto n

5) Quit

Choose your option: 5

Thank-you