```
In [23]: p=int(input("p value"))
         n=int(input("n value"))
r=int(input("r value"))
         ci=float(p*((1+n*r)/100)**n)
         print("compound interest",ci)
         p value10000
         n value1
         r value5
         compound interest 600.0
In [9]: c=int(input("c value"))
         fah = float(9/5*c+32)
         print("farenheit ",fah)
         c value4
         farenheit 39.2
In [15]: def greatest(a,b):
              if(a>b):
                  print("a is greater ")
              else:
                  print("b is greater ")
         a=int(input("a value:"))
         b=int(input("b value:"))
         greatest(a,b)
         a value:45
         b value:75
         b is greater
In [17]: def cylinder(r,h):
              PI=3.14
              cylinder=float(2*PI*r*r*h)
              print("surface areas of cylinder:",cylinder)
         def cone(r,h):
              PI=3.14
              cone=float(1/3*PI*r*r*h)
              print("surface areas of cone:",cone)
          r=int(input("r value:"))
         h=int(input("h value:"))
         cylinder(p,r)
         cone(n.r)
         r value:45
         h value:3
         surface areas of cylinder: 4521.6
         surface areas of cone: 753.6
In [21]: def greatest(a,b,c,d):
              if a>b and a>c and a>d:
                  print("a is greater")
              elif b>a and b>c and b>d:
                  print("b is greater")
              elif c>a and c>b and c>d:
                  print("c is greater")
                  print("d is greater")
         a=int(input("a value:"))
          b=int(input("b value:"))
         c=int(input("c value:"))
         d=int(input("d value:"))
         greatest(a,b,c,d)
```

a value:34 b value:23 c value:123 d value:5 c is greater

```
In [65]:
         import sympy
          loop = 1
         choice = 0
         def oddoreven(x):
              if x%2==0:
                   print("even number")
              else:
                   print("odd number")
         def odd(x):
              print("odd number are:\n")
              for i in range(1,x):
                  if(i% 2!=0):
                      print("{0}".format(i))
         def Prime(x):
              for i in range(2,x):
                  for j in range(2,i):
                      if(i % j==0):
                          break
                  else:
                      print(i)
         while loop == 1:
              print ("Welcome to calculator.py")
              print ("your options are:")
              print("1) odddeven")
print("2) factorial")
print("3) odd")
              print("4) prime")
              print("5) Quit calculator.py")
              print(" ")
              try:
                  choice = int(input("Choose your option: "))
                  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: "))
                  print(sympy.factorial(x))
              elif choice == 3:
                  x = int(input("Enter no: "))
                  odd(x)
              elif choice == 4:
                  x = int(input("Enter 1st no: "))
                  Prime(x)
              elif choice == 5:
                  loop = 0
              else:
                  print("please choice a valid option from 1 to 5")
                  choice=0
         nrint ("Thank-vou ")
         Welcome to calculator.py
         your options are:
         1) odddeven
         2) factorial
         3) odd
```

```
4) prime
5) Quit calculator.py
Choose your option: 1
Enter no: 5
odd number
Welcome to calculator.py
your options are:
1) odddeven
2) factorial
3) odd
4) prime
5) Quit calculator.py
Choose your option: 2
Enter no: 3
Welcome to calculator.py
your options are:
1) odddeven
2) factorial
3) odd
4) prime
5) Quit calculator.py
Choose your option: 3
Enter no: 6
odd number are:
3
Welcome to calculator.py
your options are:
1) odddeven
2) factorial
3) odd
4) prime
5) Quit calculator.py
Choose your option: 4
Enter 1st no: 9
3
5
Welcome to calculator.py
your options are:
1) odddeven
2) factorial
3) odd
4) prime
5) Quit calculator.py
Choose your option: 5
```

Thank-vou

In []: