1/20/2021 Home work 2

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# find the roots of OUADRATIC EQUATION
In [11]:
          import math
          print('Enter the coefficients of Quadratic Eqn')
          a=int(input('Enter the Coefficient of X2: '))
          b=int(input('Enter the coefficient of X: '))
          c=int(input('Enter the constant term: '))
          r1=(-b+math.sqrt(b*b-4*a*c))/(2*a)
          r2=(-b-math.sqrt(b*b-4*a*c))/(2*a)
          print('Roots of the Quadratic Equation are:',r1,'&',r2)
         Enter the coefficients of Quadratic Eqn
         Enter the Coefficient of X2: 1
         Enter the coefficient of X: -1
         Enter the constant term: -6
         Roots of the Quadratic Equation are: 3.0 & -2.0
In [22]:
          # check the number is prime or not
          n=int(input('Enter a natural number: '))
          count=0
          if n==1:
              print('1 is neither prime nor composite')
          else:
              for i in range(2,n+1):
                  if n%i==0:
                       count=count+1
                  else:
                       continue
              if count==1:
                  print(n,'is a prime number')
              else:
                  print(n,'is NOT prime')
         Enter a natural number: 91
         91 is NOT prime
          num=int(input("Enter a number: "))
In [39]:
          temp=num
          n=num
          sum=0
          i=0
          # to check the Length of number
          while(temp//10!=0):
              i=i+1
              temp=temp//10
          #print(i)
          while i>=0:
              rem=n%10
              sum=sum+rem**3
              n=n//10
             # print(n)
              i=i-1
          if sum==num:
              print(num,'is an Amstrong Number')
              print(num,'is NOT an Amstrong Number ')
         Enter a number: 370
         370 is an Amstrong Number
          n=int(input('Enter required number of terms:'))
In [50]:
          a=0
          b=1
          for i in range(n):
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1/20/2021 Home work_2

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print(a,end=" ")
sum=a+b
a=b
b=sum
```

Enter required number of terms:15 0 1 1 2 3 5 8 13 21 34 55 89 144 233 377

In []: #print pyramid