**Coding solutions**

**1.Sum of the series**

<https://www.geeksforgeeks.org/problems/sum-of-series2811/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution

{

// function to return sum of 1, 2, ... n

public long seriesSum(int n)

{

long a=n;

a=((a\*(a+1))/2);

return a;

}

};

**3. Armstrong Numbers**

<https://www.geeksforgeeks.org/problems/armstrong-numbers2727/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

Sol:

class Solution:

def armstrongNumber (self, n):

k = str(n)

l = len(k)

a = 0

for i in range(l):

a += int(k[i])\*\*l

if a == n:

return "Yes"

else:

return "No"

**4. REVERSE THE DIGITS**

<https://www.geeksforgeeks.org/problems/reversedigit0316/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def reverse\_digit(self, n):

N\_str=str(n)

reverse\_str=N\_str[::-1]

reverse\_int=int(reverse\_str)

return reverse\_int

**5. GCD of two numbers**

<https://www.geeksforgeeks.org/problems/gcd-of-two-numbers3459/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**Sol:**

class Solution:

def gcd(self, a : int, b : int) -> int:

# code here

while b:

a,b=b, a%b

return a

**6. Sum of digit is pallindrome or not**

<https://www.geeksforgeeks.org/problems/sum-of-digit-is-pallindrome-or-not2751/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**Sol:**

class Solution:

def isDigitSumPalindrome(self, n):

strg=str(N)

sum=0

for i in strg:

sum+=int(i)

if str(sum)==str(sum)[::-1]:

return 1

return 0

**7. Series AP**

<https://www.geeksforgeeks.org/problems/seriesap5310/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def nthTermOfAP(self, a1 : int, a2 : int, n : int) -> int:

# code here

d=a2-a1;

return a1+(n-1)\*d

**8.Addition of two numbers**

<https://www.geeksforgeeks.org/problems/addition-of-two-numbers0812/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**Sol:**

class Solution

{

public int addition(int A, int B)

{

//code here

return A+B;

}

}

**9.** **Odd or even**

<https://www.geeksforgeeks.org/problems/odd-or-even3618/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def oddEven (ob,N):

if (N%2==0):

return "even"

else:

return "odd"

**10. Multiplication table**

<https://www.geeksforgeeks.org/problems/printtable0303/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def getTable(self,N):

lis=[N\*i for i in range(1,11)]

return lis

**11.Swap two numbers**

<https://www.geeksforgeeks.org/problems/swap-two-numbers3844/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def get(self, a, b):

#code here

return b,a

**12. npr**

<https://www.geeksforgeeks.org/problems/npr4253/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def nPr(self, n, r):

# code here

res=1

for i in range(n,n-r,-1):

res\*=i

return res

**13. The dice problem**

<https://www.geeksforgeeks.org/problems/the-dice-problem2316/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def oppositeFaceOfDice(self, N):

faces=[6,5,4,3,2,1]

return faces [N-1]

**14. Average in streams**

<https://www.geeksforgeeks.org/problems/average4856/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def streamAvg(self, arr, n):

# code here

l=[]

t=0

for i in range(len(arr)):

t+=arr[i]

p=t/(i+1)

l.append(p)

return l

**15.Sum palindrome**

<https://www.geeksforgeeks.org/problems/sum-palindrome3857/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def isSumPalindrome (self, n):

# code here

if n==int(str(n)[::-1]):

return n

for i in range(5):

n+=int(str(n)[::-1])

if n==int(str(n)[::-1]):

return n

return -1

**16. Greatest of three numbers**

<https://www.geeksforgeeks.org/problems/greatest-of-three-numbers2520/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

Sol:

class Solution:

def greatestOfThree(self,A,B,C):

#code here

g=A

if B>g:

g=B

if C>g:

g=C

return g

**17. Find n-th term of series 1, 3, 6, 10, 15, 21**

<https://www.geeksforgeeks.org/problems/find-n-th-term-of-series-1-3-6-10-15-215506/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

**sol:**

class Solution:

def findNthTerm(self, N):

# code here

return N\*(N+1)//2

**18. Simple Interest**

<https://www.geeksforgeeks.org/problems/simple-interest3457/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

sol:

class Solution:

def simpleInterest(self,A,B,C):

i=(A\*B\*C)/100

return i

**19. Number of divisors**

<https://www.geeksforgeeks.org/problems/number-of-divisors1631/1?page=1&category=Mathematical&difficulty=School&sortBy=submissions>

sol:

class Solution:

def count\_divisors(self, N):

count=0

for i in range(1,int(N\*\*0.5) + 1):

if N%i==0:

if i%3==0:

count+=1

if i!=N//i and (N//i)%3==0:

count+=1

return count

**20. Power of Pow | Even Number**

<https://www.geeksforgeeks.org/problems/power-of-pow-even-number5440/1?page=2&category=Mathematical&difficulty=School&sortBy=submissions>

sol:

class Solution:

def sum\_of\_square\_evenNumbers(self, n):

# Code here

ans=int(2\*n\*(n+1)\*(2\*n+1))//3

return ans