Date:2024-08-20

S.No: 17 Exp. Name: Perfect Roll number

Aim:

In a group of students, everyone has a unique roll number. One day they are willing to find the students who have the perfect roll numbers.

They need your assistance to determine whether the given roll number is the perfect number or not. Can you assist them by writing a program in Python?

Note: A perfect Number is a number for which the sum of its positive divisors (excluding itself) is equal to the number itself.

Constraints:

Roll Number must be a positive integer.

Input Format:

The input line reads an integer representing a roll number.

Output Format:

The output line prints whether the given roll number is a perfect number or not.

Source Code:

PerfectRollNumber.py

```
def is_perfect_number(number):
   # write your code here...
   divisor=sum([i for i in range(1,number) if number%i==0])
   return number == divisor
roll number = int(input())
if is_perfect_number(roll_number):
    print("Perfect number")
else:
    print("Not a perfect number")
```

Execution Results - All test cases have succeeded!

Test Case - 1	
User Output	
6	
Perfect number	

Test Case - 2	
User Output	
25	
Not a perfect number	