Name:	Redg.No:

## **Program logic Description:**

The program runs until number n>0. In each iteration, it adds the rightmost digit (n%10) to sum and updates the number to n/10. In the end, after the loop terminates if the sum is equal to the original number, then the program prints "a perfect number" otherwise, prints "not a perfect number".

## **Output:**

Test case 1: Enter a large number: 12134616235835

The unique digits present in 12134616235835 are 1, 2, 3, 4, 6, 5, 8.

The largest number possible out of these unique digits is 8654321.

**Test case 2:** Enter a large number: **11131116111811** 

Test case 3: Enter a large number: 7

Test case 4: Enter a large number: 11111111111

Test case 5: Enter a large number: 1253478690

Test case 6: Enter a large number: 000000000

Test case 7: Enter a large number: 1222222222

Test case 8: Enter a large number: 33333333335