

Week 5 : Programming Assignment 1

Write a C program to check whether a given number (N) is a perfect number or not.
[Perfect Number - A perfect number is a positive integer number which is equals to the sum of its proper positive divisors. For example 6 is a perfect number because its proper divisors are 1, 2, 3 and it's sum is equals to 6.]

Sample Test Cases

	Input	Output
Test Case 1	8128	8128 is a perfect number.
Test Case 2	8000	8000 is not a perfect number.
Test Case 3	6	6 is a perfect number.
Test Case 4	87	87 is not a perfect number.

```
#include <stdio.h>
int main()
{
    int N;
    scanf("%d",&N); /* An integer number taken as input from test cases */

    int i, sum=0;
    for(i=1; i<N;i++)
    {
        if(N%i==0)
            sum+=i;
    }

    if(sum==N)
        printf("\n%d is a perfect number.",N);
    else
        printf("\n%d is not a perfect number.",N);
}
```