

Week 5 : Programming Assignment 3

Write a C program to check whether the given number(N) can be expressed as Power of Two (2) or not.

For example 8 can be expressed as 2^3 .

Sample Test Cases

	Input	Output
Test Case 1	256	256 is a number that can be expressed as power of 2.
Test Case 2	800	800 cannot be expressed as power of 2.
Test Case 3	8	8 is a number that can be expressed as power of 2.
Test Case 4	66	66 cannot be expressed as power of 2.

```
#include <stdio.h>
int main()
{
    int N;
    scanf("%d",&N); /* The value of N is taken from the test case data */

    int temp, flag;
    temp=N;
    flag=0;

    while(temp!=1)
    {
        if(temp%2!=0){
            flag=1;
            break;
        }
        temp=temp/2;
    }

    if(flag==0)
        printf("%d is a number that can be expressed as power of 2.",N);
    else
        printf("%d cannot be expressed as power of 2.",N);
}
```