Week-05 Problem-03

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.

<table>
<thead>
<tr>
<th>Test Case</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Case 1</td>
<td>65 72</td>
<td>6572 cannot be expressed as power of 2.</td>
</tr>
<tr>
<td>Test Case 2</td>
<td>10 24</td>
<td>1024 is a number that can be expressed as power of 2.</td>
</tr>
<tr>
<td>Test Case 3</td>
<td>8</td>
<td>8 is a number that can be expressed as power of 2.</td>
</tr>
<tr>
<td>Test Case 4</td>
<td>46</td>
<td>46 cannot be expressed as power of 2.</td>
</tr>
</tbody>
</table>

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Sample solutions (Provided by instructor)

```c
#include <stdio.h>

int main()
{
    int N;
    scanf("%d", &N); /* The value of N is taken from the test case data */
    /* Complete the code */
    use the printf statements as below
```
Loops (unit? unit=6&lesson=37)

Lecture 24: Example of Loops (Contd.) (unit? unit=6&lesson=38)

Lecture 25: Example of Loops (Contd.), Use of FOR Loops (unit? unit=6&lesson=39)

Quiz: Assignment 5 (assessment? name=104)

Week-05 Problem-01 (/noc20_cs06/progassignment? name=118)

Week-05 Problem-02 (/noc20_cs06/progassignment? name=119)

Week-05 Problem-03 (/noc20_cs06/progassignment? name=120)

Week-05 Program-04 (/noc20_cs06/progassignment? name=121)

Week-05 Program-05 (/noc20_cs06/progassignment? name=122)

Feedback For Week 5 (unit? unit=6&lesson=130)

Week 6
Week 7
Week 8
Week 9
Week 10

printf("%d is a number that can be expressed as power of 2.",N);
printf("%d cannot be expressed as power of 2.",N);

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);