Due on 2020-03-05, 23:59 IST

Week-05 Problem-01

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

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>8000</td>
<td>8000 is not a perfect number.</td>
</tr>
<tr>
<td>8128</td>
<td>8128 is a perfect number.</td>
</tr>
<tr>
<td>6</td>
<td>6 is a perfect number.</td>
</tr>
<tr>
<td>87</td>
<td>87 is not a perfect number.</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); /* An integer number taken as input from test case */
    /* Complete the program by writing the rest of the code in the space pr
    */
    Please copy and paste the printf statement given below wherever requir
```
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

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```c
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);
```

10 println("\n%d is a perfect number.",N);
11 println("\n%d is not a perfect number.",N);
12 
13 int i, sum=0;
14 for(i=1; i<N; i++)
15 {
16     if(N%i==0)
17         sum+=i;
18 }
19 if(sum==N)
20     println("\n%d is a perfect number.",N);
21 else
22     println("\n%d is not a perfect number.",N);
23 ```