Week-08 Program-01

Write a C Program to find HCF of 4 given numbers using recursive function

Sample Test Cases

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 455 60 200</td>
<td>The HCF is 5</td>
</tr>
<tr>
<td>67 89 45 41</td>
<td>The HCF is 1</td>
</tr>
<tr>
<td>100 30 50 70</td>
<td>The HCF is 10</td>
</tr>
<tr>
<td>49 56 147 21</td>
<td>The HCF is 7</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 HCF(int, int); //You have to write this function which calculates 1
int main()
{
    int a, b, c, d, result;
    scanf("%d %d %d %d", &a, &b, &c, &d); /* Takes 4 number as input fr<
    result = HCF(HCF(a, b), HCF(c,d));
    printf("The HCF is %d", result);
    return 0;
}

//Complete the rest of the program to calculate HCF
int HCF(int x, int y)
{
    while (x != y)
    {
        if (x > y)
        {
            return HCF(x - y, y);
        }
        else
        {
            return HCF(x, y - x);
        }
    }
    return x;
}
```

Quiz:
Assignment 8
(assessment? name=140)

Week-08 Program-01
(Inoc20_cs06/propassignment? name=142)

Week-08 Program-02
(Inoc20_cs06/propassignment? name=144)

Week-08 Program-03
(Inoc20_cs06/propassignment? name=145)

Week-08 Program-04
(Inoc20_cs06/propassignment? name=146)

Week-08 Program-05
(Inoc20_cs06/propassignment? name=147)

Feedback For
Week 8 (unit?)

https://onlinecourses.nptel.ac.in/noc20_cs06/propassignment?name=142