

## Answer on Question#37823- Programming, C++

1. A function is defined as follows:

$f(n)=0$  if  $n=0$

$f(n)=n-1$  if  $n>5$

$f(n)=f(n+f(n+2))$  if  $n\leq 5$

Write a recursive program for the above function.

### Solution.

```
#include <iostream>
using namespace std;

int f(int);
void main()
{
    int n=0;
    cin>>n;

    f(n);

    system("pause");
    return;
}

int f(int n)
{
    cout<<n<<endl;
    if(n==0){ return 0;}
    if(n>5){ return f(n-1);}
    if(n<=5){ return f(n+f(n+2));}
}
```

