

Practical 3: Write a program to generate Fibonacci series using recursion.

```
#include<iostream>

using namespace std;

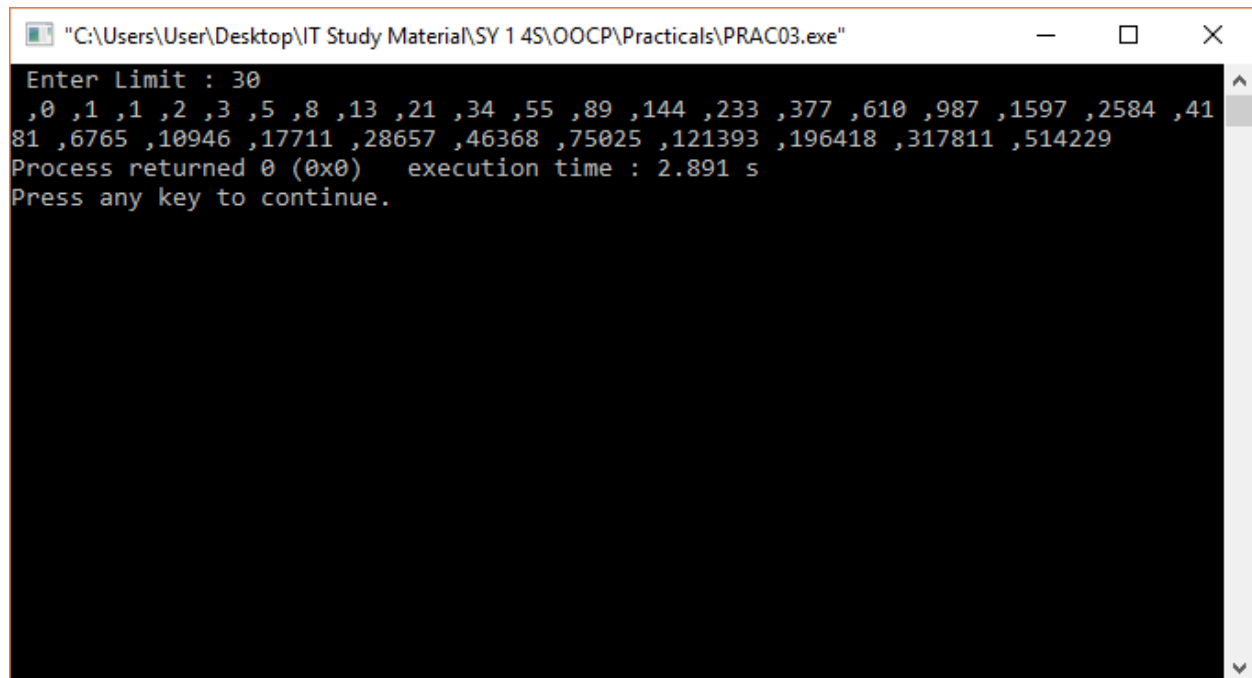
int y;

int rec(int x);

int main()
{
    cout<<" Enter Limit : ";
    cin>>y;
    for(int i=0;i<y;i++)
        cout<<" "<<rec(i);

    return 0;
}

int rec(int x)
{
    if(x==0)
        return 0;
    else if(x==1)
        return 1;
    else
        return (rec(x-2)+rec(x-1));
}
```



A screenshot of a Windows command prompt window. The title bar shows the file path: "C:\Users\User\Desktop\IT Study Material\SY 1 4S\OOCp\Practicals\PRAC03.exe". The window contains the following text:

```
Enter Limit : 30
,0 ,1 ,1 ,2 ,3 ,5 ,8 ,13 ,21 ,34 ,55 ,89 ,144 ,233 ,377 ,610 ,987 ,1597 ,2584 ,41
81 ,6765 ,10946 ,17711 ,28657 ,46368 ,75025 ,121393 ,196418 ,317811 ,514229
Process returned 0 (0x0)   execution time : 2.891 s
Press any key to continue.
```

The text is displayed in a monospaced font on a black background. The first line is the prompt "Enter Limit : 30". The second line shows a sequence of numbers: ",0 ,1 ,1 ,2 ,3 ,5 ,8 ,13 ,21 ,34 ,55 ,89 ,144 ,233 ,377 ,610 ,987 ,1597 ,2584 ,41". The third line continues the sequence: "81 ,6765 ,10946 ,17711 ,28657 ,46368 ,75025 ,121393 ,196418 ,317811 ,514229". The fourth line shows the program's exit status and execution time: "Process returned 0 (0x0) execution time : 2.891 s". The fifth line is the instruction "Press any key to continue.".