SIT384 Cyber security analytics

Pass Task 2.2P: Recursion Fibonacci

Task description:

A Fibonacci sequence is the integer sequence of 0, 1, 1, 2, 3, 5, 8.... The first two terms are 0 and 1. All other terms are obtained by adding the preceding two terms. The nth term is the sum of (n-1)th and (n-2)th term.

Define a function which accepts a passed argument and calculates its Fibonacci sequence. A program accepts user's input and calls the function. If the input is a non-positive integer, keep prompting error message until a valid input is provided. Output the sequence on the same line, separated by ",". (Please use **recursive** function call in the function definition.)

(Sample output as shown in the following figure is for demonstration purposes only.)

```
How many terms? -1
Please enter a positive integer


How many terms? 1
Fibonacci sequence up to 1 :
0

How many terms? 10
Fibonacci sequence up to 10 :
0 , 1 , 1 , 2 , 3 , 5 , 8 , 13 , 21 , 34
```

Submission:

Submit the following files to OnTrack:

1. Your program source code (e.g. task2-2.py)
2. A screen shot of your program running

Check the following things before submitting:

1. Add proper comments to your code