

Aim: Write the program for the following: (by using control statements and control structure)

(C). Write a program to generate the Fibonacci series.

Theory: -

Practical Implementation:-

Code:-

```
# program tp display the fibonacci sequence up to n-th term where n is provided
# change this value for a different result
nterms = 10

# uncomment to take input from the user
# nterms = int(input("how many terms?"))

# first two terms
n1=0
n2=1
count=2

# check if the number of terms is valid
if nterms<=0:
    print("please enter a positive integer:")
elif nterms==1:
    print("fibonnaci sequence upto",nterms,":")
    print(n1)
else:
    print("fibonnaci sequence upto",nterms,":")
    print(n1,",",n2,',')
```

```
while count < nterms:
```

```
    nth = n1+n2
```

```
    print (nth, ' , ')
```


```
    # update values
```

```
    n1 = n2
```

```
    n2 = nth
```

```
    count += 1
```

OUTPUT:

 Python 3.4.3 Shell

```
File Edit Shell Debug Options Window Help
Python 3.4.3 (v3.4.3:9b73f1c3e601, Feb 24 2015, 22:44:40) [MSC v.1600 64
Type "copyright", "credits" or "license()" for more information.
>>> ===== RESTART =====
>>>
fibonnaci sequence upto 10 :
0 , 1 ,
1 ,
2 ,
3 ,
5 ,
8 ,
13 ,
21 ,
34 ,
>>> |
```

Conclusion: