

Algorithm

int main()

1. Start
2. Input n
3. fibonacci(n)
4. Stop

int fibonacci(int n)

1. Start
2. Initialize $fib1 = 0, fib2 = 1$.

3. if ($n == 1$)

Print $fib1$

4. elseif ($n == 2$)

Print $fib1, fib2$

5. else

Print $fib1, fib2$

Repeat through 5.1

- 5.1. for ($i = 3; i \leq n; i++$)

$fib3 = fib1 + fib2$

$fib1 = fib2$

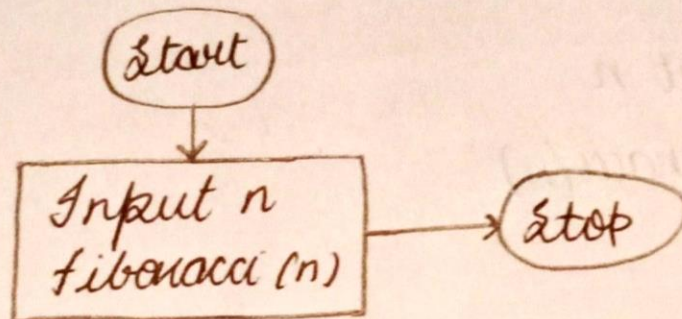
$fib2 = fib3$

Print $fib3$

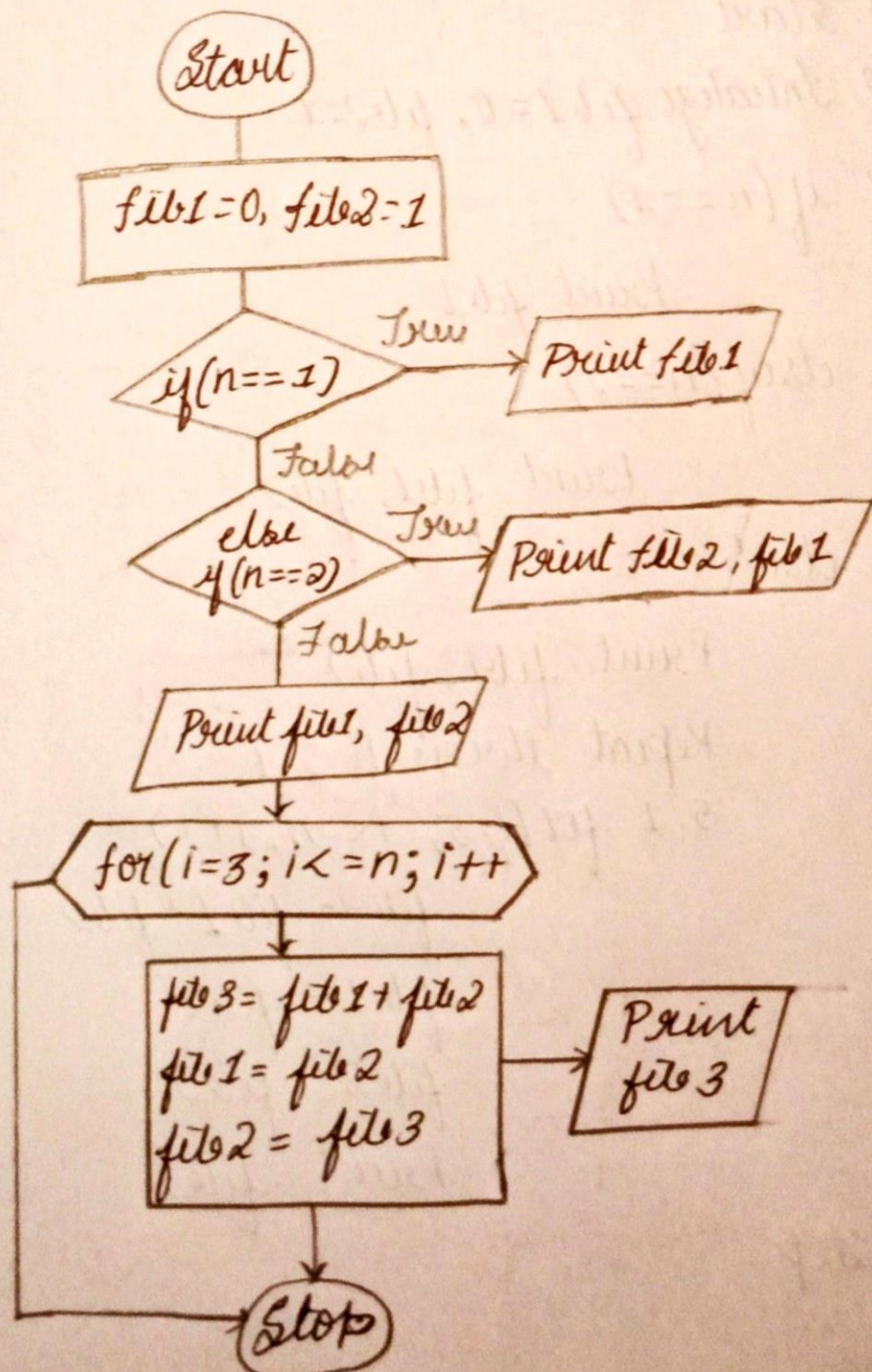
6. stop.

Flowchart

int main()



int fibonacci(int n)



C (gcc 6.3)



Code gets autosaved every second

```
10 int fibonacci(int n)
11 {
12     int i, fib1=0, fib2=1, fib3;
13     if(n==1)
14     {
15         printf("%d\n", fib1);
16     }
17     else if(n==2)
18     {
19         printf("%d\t%d\t", fib1, fib2);
20     }
21     else
22     {
23         printf("%d\t%d\t", fib1, fib2);
24         for(i=3; i<=n; i++)
25         {
26             fib3=fib1+fib2;
27             fib1=fib2;
28             fib2=fib3;
29             printf("%d\t", fib3);
30         }
31     }
32 }
```

0:0

Open File

✓ Custom

Custom Input

7

Status Successfully executed Date 2020-07-01 11:07:35 Time 0 sec Mem 9.424

Input

7

Output

Enter n upto which fibonacci series to be generated

0 1 1 2 3 5 8