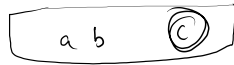
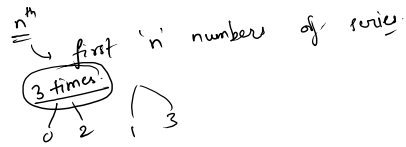
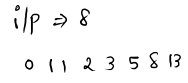
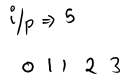
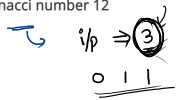


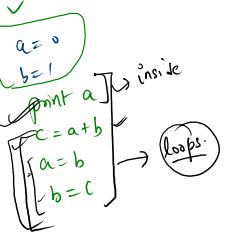
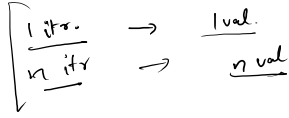
Fibonacci Series



Fibonacci number 12



let's code



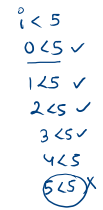
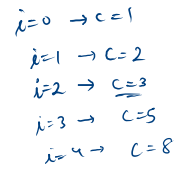
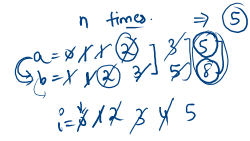
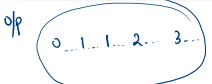
```
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();

        int a = 0;
        int b = 1;

        for(int i = 0; i < n; i++){
            System.out.print(a + " ");
            int c = a + b;
            a = b;
            b = c;
        }
    }
}
```



Nth Fibonacci Number 7

i/p → 6

o/p → 8

i/p → 4

o/p → 3

i/p → 8

o/p → 21

✓ 0 1 1 2 3 5 8 13 21
0 1 2 3 4 5 6 7 8

1 1 2 3 5 8 13 21
1 2 3 4 5 6 7 8

```
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();

        int a = 0;
        int b = 1;

        for(int i = 1; i <= n; i++){

            int c = a + b;
            a = b;
            b = c;

        }
        System.out.print(a);
    }
}
```

n=6

a = 0 1 1 2 3 5 8
b = 1 1 2 3 5 8 13

c = 1 2 3 5 8 13

2 ≤ 6
3 ≤ 6
4 ≤ 6
5 ≤ 6
6 ≤ 6

XXXXXXXX
(7 ≤ 6) ✓

```
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();

        int a = 0;
        int b = 1;

        for(int i = 1; i <= n; i++){

            int c = a + b;
            a = b;
            b = c;

        }
        System.out.print(a);
    }
}
```

n=4

a = 0 1 1 2 3 5
b = 1 1 2 3 5

0 = 1 2 3 4 5
c = 1 2 3 5

0 1 1 2 3 5
0 1 2 3 4 5

XXXXX

2 ≤ 4 ✓
3 ≤ 4 ✓

4 ≤ 4 ✓
5 ≤ 4 ✗

while loop.

~> similar for loop.

while (^A condⁿ)

{

B body

}



while (~~condⁿ~~) ^{→ true}

{

}

(A)

✓
(B)

✓
(C)

(D)

0
1
while (—)
{

↓

```
for ( ( ) ; ( ) ; ( ) )  
{  
  
}
```