Q Sum of loop

n = 3 → score

10 + 15 + 14 ⇒ 40

```
for(i=1 to n){
    ans +=
}
4
Sysо(ans);
```

n ?

↓

10 20 30

40 50

5 ✓

10 20 30 40 50

1 to 5

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int ans =0;
    for(int i =1;i<=n;i++){
        int val = scn.nextInt();
        ans +=val;
        System.out.print(ans+" ");
    }

    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class sh
}
```

n = 5 ✓

i = 1 2 3 4 5 6 ✓

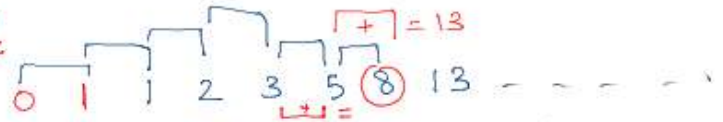
ans 0 ✓ 1 4 8 13 19

1 3 4 5 6

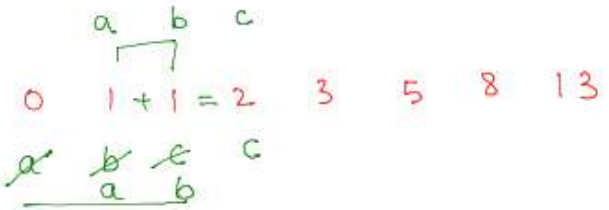
val val val val val ✓

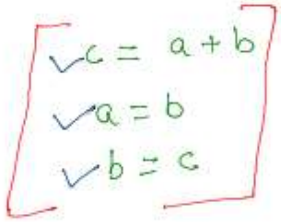
1 4 8 13 19

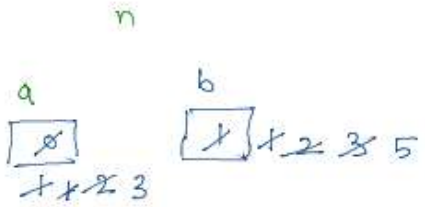
Qu fib

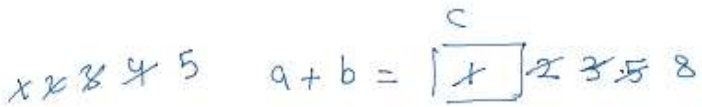


$f(i) = f(i-1) + f(i-2)$





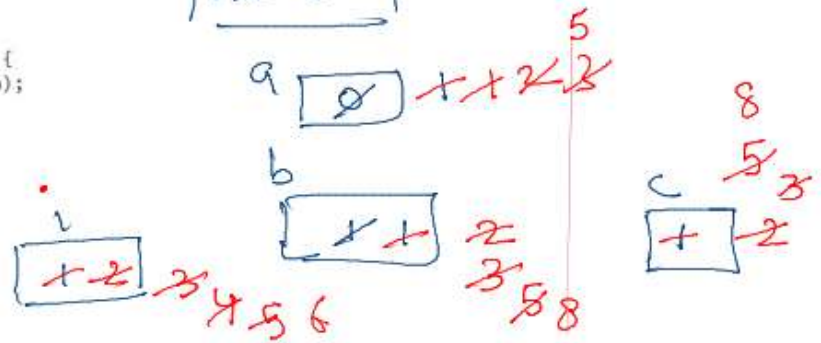


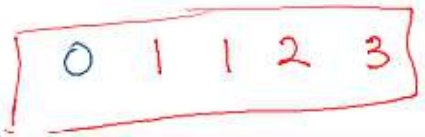


Syso (a) ⇒ 0 1 1 2 3

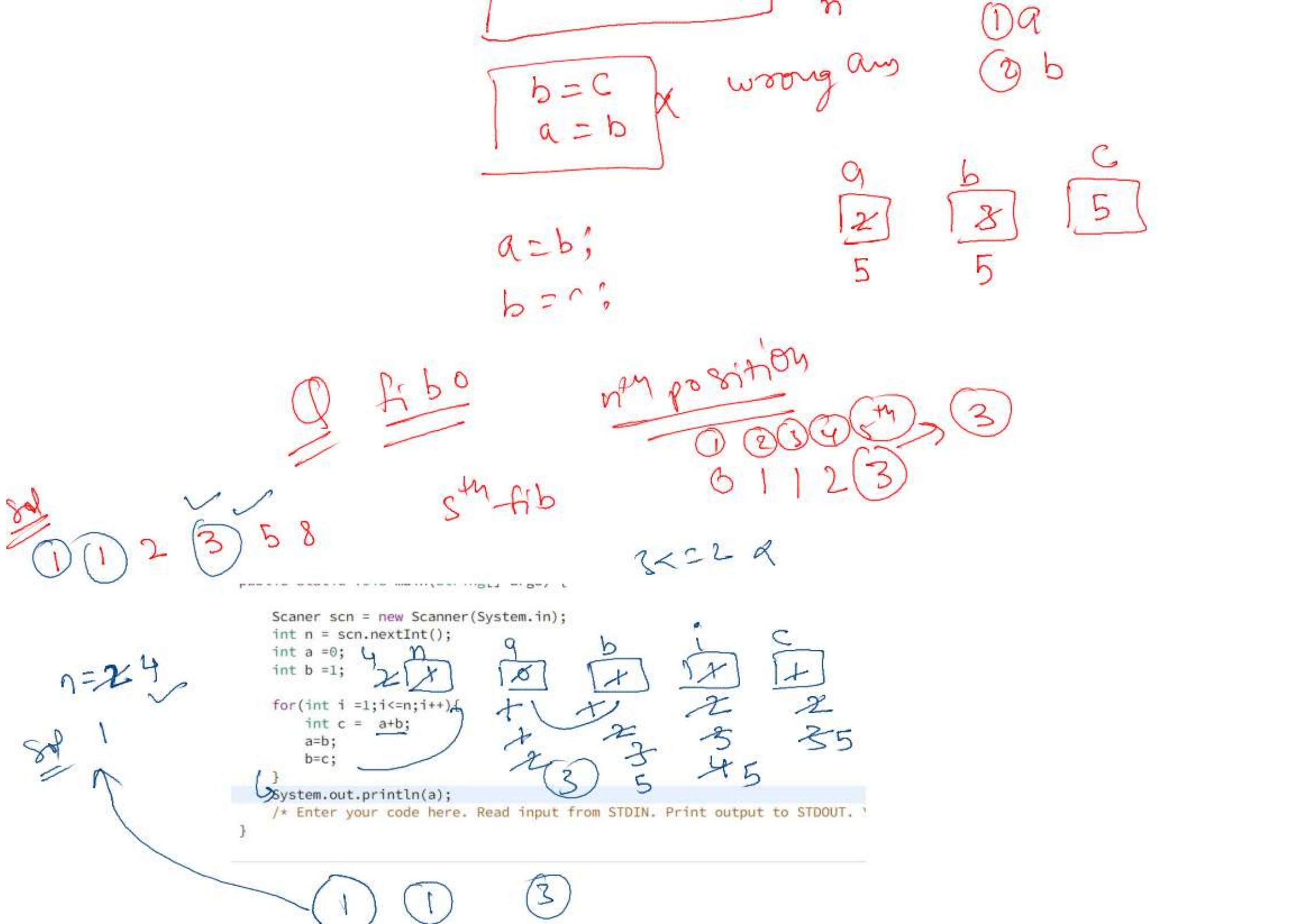

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();

    int a =0;
    int b =1;
    for(int i=1;i<=n;i++){
        System.out.print(a+" ");
        int c = a+b;
        a=b;
        b=c;
    }
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class shou
}
```





① a


b=c
a=b
wrong ans
a=b;
b=c;
Q fibo
nth position
sth fib
3<=2 ?
Scaner 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.println(a);
/* Enter your code here. Read input from STDIN. Print output to STDOUT.
}

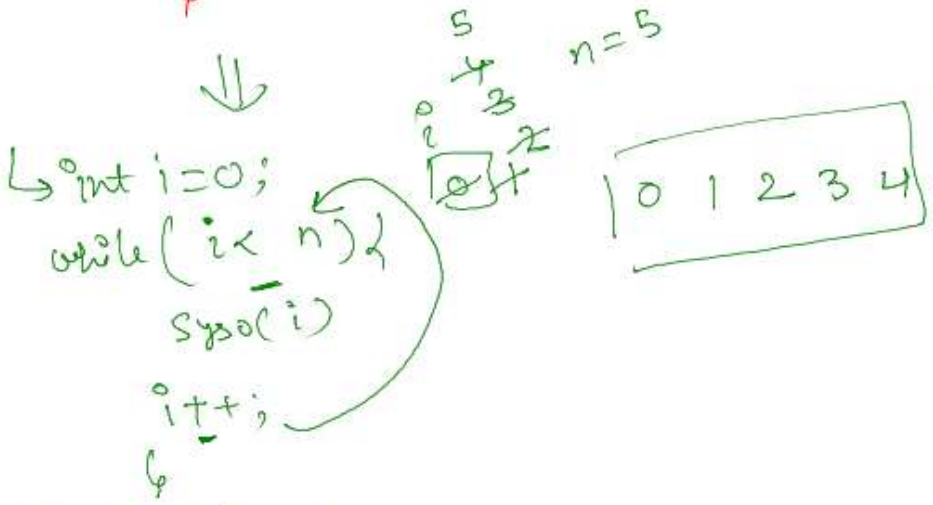
While loop

for(—;—;—){
// block of code
}

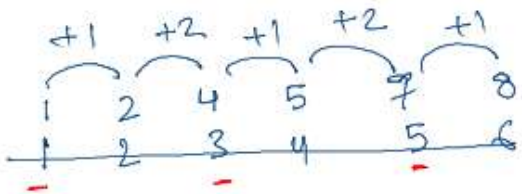
Syntax

initialization
while (termination of
// block of code
updation
}

( )

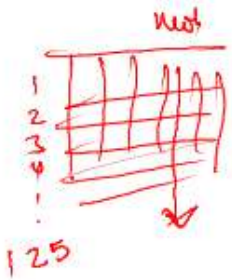


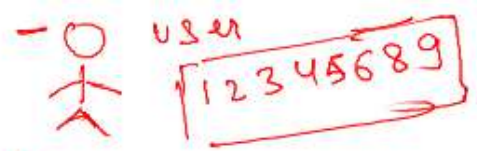
Condition



while(i<=n){
if(i%2==1){
i+1;
}
else{
i+=2;
}
}

while





id
⇒ 125

update

= 100

boolean flag = DB (user)

true

false

update

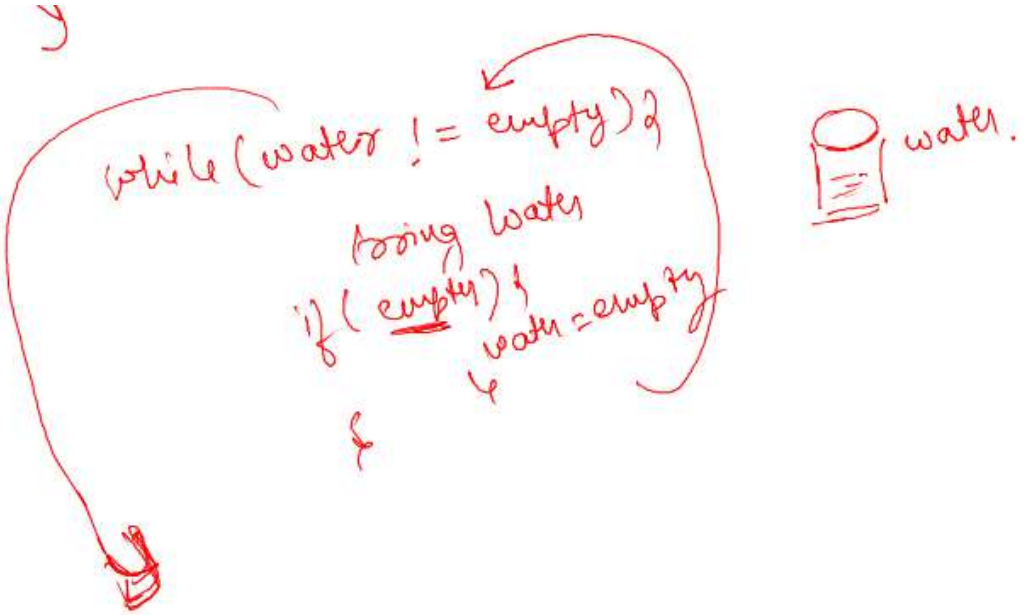
create

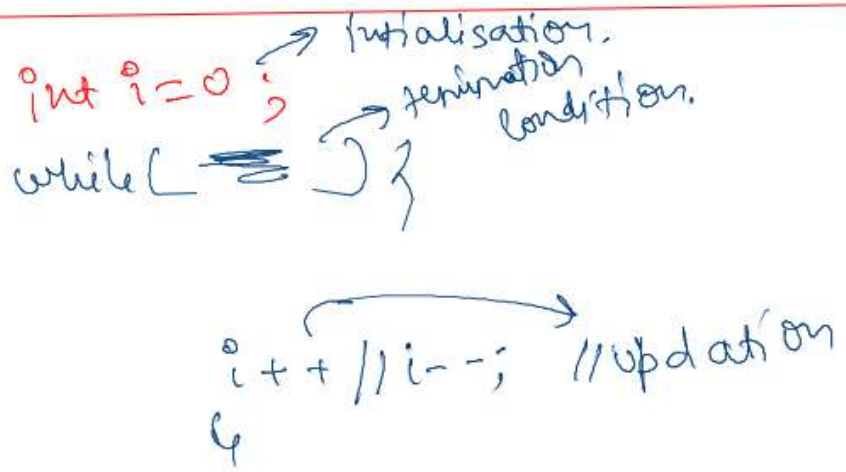
boolean flag = true

while (flag) {

if (task = complete) {
flag = false;
}

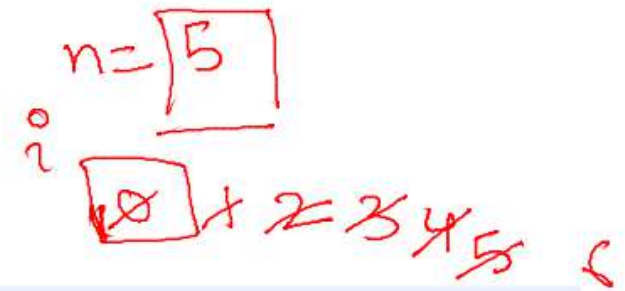
}

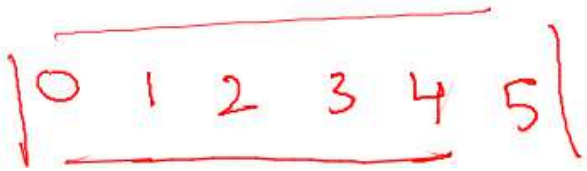

while (water != empty) {
taking water
if (empty) {
water = empty
}
}
water.


int i=0 ;
initialisation.
termination condition.
while( ) { }
i++ // i--; // updation
}

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

    int i =0; // initialize
    while(i<=n){ // termination condition
        System.out.println(i);
        i++; // updation
    }
```





Q AP = 4, 13, 22, 31 ---- n

+9 +9 9 9 ----

40

32

initialization

```
int i = 4; // →
while(i<=n) { // termination cond^n
  Syso(i);
    i+=9; // updation
```

4 13 22 31

4

func

```
while ( a < b  && b<c) {
    if( ) {
      b++; ✓
    }
    else if( ) {
      c++; ✓
    }
    else
      sysn("Hi");
}
```