Q

```java
public class Solution {

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

        int ans =1;
        int i=1;

        while(i<=n){
            ans = ans *10;
            i++;
        }

        System.out.println(ans);
        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your cla
    }
}
```

n = 4

i = 1 2 3 4 5
ans = 1 10 100 1000 10000
n = 4

5 <= 4

10000

Q

0 1 1 2 4 7 13 24

$f(n) = f(n-1) + f(n-2) + f(n-3)$

a = 0

b = 1

c = 1;

nth fibonacci

logic is same

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

    int i=1;
    int a =0;
    int b =1;
    int c = 1;
    while(i<=n){
        int d = a+b+c;
        a=b;
        b=c;
        c=d;
        i++;
    }

    System.out.println(a);

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

Q Print digit from last

n = 12345

int rem = 12345 % 10   rem = ? 5

Syso(rem);   12345/10 = 1234

n = n/10;

while(n > 0){
    int rem = ?
    sysoln(rem);
    n = ?
}

```java
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();

        while(n>0){
            int rem = n%10;
            System.out.println(rem);
            n = n/10;
        }
        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your clas:
    }
}
```

n = 87832 → 0

rem = 8 7 8

2
3
8
7
8

H.W

n = 12345 → 54321

1
2
3
4
5

Que Count of digits

n = 12345689

Count = 8

```java
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 count=0;
        while(n>0){
            count++;
            n=n/10;
        }

        System.out.println(count);
        /* Enter your code here. Read input from STDIN. Print output to STDOUT.
    }
}
```

6✓

n=0 1 2 3 4 5 6

count = 0 1 2 3 4 5 6✓

Q n/2

```java
public class Solution {

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

        int count=0;

        while(n>0){
            count++;
            n = n/2;
        }

        System.out.println(count);
        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your
    }
}
```

Q. find max and increment count

max = 12

[4 12 3 9]

✓ incase of finding max → int max = Integer.MIN_VALUE; −∞

✓ incase of finding min = int min = Integer.MAX_VALUE; → +∞

int max = 0; n = 4

[-9 -12 -3 -2]

curr curr curr curr

while(i<=4)

if (curr > max)

max = curr;

i++;

max = −∞ −9 −3 −2 ✓

max

int max = Integer.MIN_VALUE (−∞)

[−2, −3, −4, −6]

int min = Integer.MAX_VALUE (+∞)

[2, 3, 4, 5, 1, 2, 10]

max = −∞ 2 3 4 5 10

count = 0 1 2 3 4 5

```java
public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();
        int i =1;
        int count=0;
        int max = Integer.MIN_VALUE;
        while(i<=n){
            int val = scn.nextInt();
            if(val>max){
                max=val;
                count++;
            }
            i++;
        }
        System.out.println(count);
        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should
    }
}
```

[2, 3, 4, 5, 1, 2, 10] ; i

n = 7

count = 0 1 2 3 4 5

val = 2 3 4 5 1 2 10

5 ans

n = 1

[−13]

count = 1;

max = scn.nextInt()

while (i<n) { val = −13;

if (max < val)

max = −13

count++;

}

i++; }

sysout (count)

Sol = 1

Q4 z Y x W — — — —

1 2 3 4

1 → odd → smaller case

4 → upper case

char ch = 'z';

ch - 32

Z ←32→ z

ch--;

A ←-32→ a, a → +32 → A

```java
public class Solution {

    public static void main(String[] args) {
        char ch ='z';
        int i=1;

        while(ch>='a'){
            if(i%2==1){
                System.out.print(ch+" ");
            }else{
                char caps = (char)(ch-32);
                System.out.print(caps+" ");
            }
            ch--;
            i++;
        }
        /* Enter your code here. Read input from STDIN. Print output to STDOUT. */
    }
}
```

'Y' ← (char) ['y' - 32]

ch = 'z' 'y' 'x' 'w'

caps = 'Y' 'W'

z Y x W - - - - - - - 'a'

Print Patterns.

n = 7 → "*******";

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt(); = 4

    for(int i=1;i<=n;i++){ // outer for loop
        for(int j=1;j<=n;j++){ //inner for loop
            System.out.print("*");
        }
        System.out.println();
    }
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should
}
```

i = 1 2 3 4

****
****
****
****

for( ){
    for( ){

4 4

n×n

	1	2	3	4
1	*	*	*	*
2	*	*	*	*
3	*	*	*	*
4	*	*	*	*