Lecture 5 : Patterns - 1

Code : Square Pattern

Send Feedback

Print the following pattern for the given N number of rows.

Pattern for N = 4

```
4444
4444
4444
4444
```

Input format :

Integer N (Total no. of rows)

Output format :

Pattern in N lines

Constraints

0 <= N <= 50

Sample Input 1:

```
7
```

Sample Output 1:

```
7777777
7777777
7777777
7777777
7777777
7777777
7777777
```

Sample Input 1:

```
6
```

Sample Output 1:

```
666666
666666
666666
666666
666666
666666
```

```
import java.util.Scanner;
public class Solution {

	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		int n = sc.nextInt();
		for(int i=0; i<n; i++){
			for(int j=0; j<n; j++){
				System.out.print(n);
			}
			System.out.println();
		}
	}
}
```

Code : Triangular Star Pattern

Send Feedback

Print the following pattern for the given N number of rows.

Pattern for N = 4

```
*
**
***
****
```

Note : There are no spaces between the stars (*).

Input format :

Integer N (Total no. of rows)

Output format :

Pattern in N lines

Constraints

0 <= N <= 50

Sample Input 1:

5

Sample Output 1:

```
*
**
***
****
*****
```

Sample Input 2:

6

Sample Output 2:

```
*
**
***
****
*****
******
```

```
import java.util.Scanner;
public class Solution {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		int n = sc.nextInt();
		for(int i=0; i<n; i++){
			for(int j=0; j<i+1; j++){
				System.out.print("*");
			}
			System.out.println();
		}
	}
}
```

Code : Triangle Number Pattern

Send Feedback

Print the following pattern for the given N number of rows.

Pattern for N = 4

```
1
22
333
4444
```

Input format :

Integer N (Total no. of rows)

Output format :

Pattern in N lines

Constraints

0 <= N <= 50

Sample Input 1:

5

Sample Output 1:

```
1
22
333
4444
```

55555

Sample Input 2:

6

Sample Output 2:

1
22
333
4444
55555
666666

```
import java.util.Scanner;
public class Solution {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		int n = sc.nextInt();
		for(int i=0; i<n; i++){
			for(int j=0; j<i+1; j++){
				System.out.print(i+1);
			}
			System.out.println();
		}
	}
}
```

Code : Reverse Number Pattern

Send Feedback

Print the following pattern for the given N number of rows.

Pattern for N = 4

1
21
321
4321

Input format :

Integer N (Total no. of rows)

Output format :

Pattern in N lines

Constraints

0 <= N <= 50

Sample Input 1:

5

Sample Output 1:

```
1
21
321
4321
54321
```

Sample Input 2:

```
6
```

Sample Output 2:

```
1
21
321
4321
54321
654321
```

```
import java.util.Scanner;
public class Solution {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		int n = sc.nextInt();
		for(int i=0; i<n; i++){
			for(int j=i+1; j>0; j--){
				System.out.print(j);
			}
			System.out.println();
		}
	}
}
```

Code : Alpha Pattern

Send Feedback

Print the following pattern for the given N number of rows.

Pattern for N = 3

```
 A
 BB
 CCC
```

Input format :

Integer N (Total no. of rows)

Output format :

Pattern in N lines

Constraints

0 <= N <= 26

Sample Input 1:

7

Sample Output 1:

A
BB
CCC
DDDD
EEEEE
FFFFFF
GGGGGGG

Sample Input 2:

6

Sample Output 2:

A
BB
CCC
DDDD
EEEEE
FFFFFF

```
import java.util.Scanner;
public class Solution {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		 int n = sc.nextInt();
		 char x = 65;
		 for(int i=0; i<n; i++){
			for(int j=0; j<i+1; j++){
			    System.out.print((char)(x+i));
			}
			System.out.println();
		 }
	}
}
```

Code : Character Pattern

Send Feedback

Print the following pattern for the given N number of rows.

Pattern for N = 4

A
BC
CDE
DEFG

Input format :

Integer N (Total no. of rows)

Output format :

Pattern in N lines

Constraints

0 <= N <= 13

Sample Input 1:

5

Sample Output 1:

A
BC
CDE
DEFG
EFGHI

Sample Input 2:

6

Sample Output 2:

A
BC
CDE
DEFG
EFGHI
FGHIJK

```
import java.util.Scanner;
public class Solution {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		int n = sc.nextInt();
		char x = 'A';
		for(int i=0; i<n; i++){
			for(int j=0; j<i+1; j++){
				System.out.print((char)(x+i+j));
			}
			System.out.println();
		}
	}
}
```

Code : Interesting Alphabets

Send Feedback

Print the following pattern for the given number of rows.

Pattern for N = 5

E
DE
CDE

BCDE
ABCDE

Input format :

N (Total no. of rows)

Output format :

Pattern in N lines

Constraints

0 <= N <= 26

Sample Input 1:

8

Sample Output 1:

H
GH
FGH
EFGH
DEFGH
CDEFGH
BCDEFGH
ABCDEFGH

Sample Input 2:

7

Sample Output 2:

G
FG
EFG
DEFG
CDEFG
BCDEFG
ABCDEFG

```
import java.util.Scanner;
public class Solution {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		int n = sc.nextInt();
		char x = 'A';
		for(int i=n-1; i>=0; i--){
			for(int j=0; j<n-i; j++){
			    System.out.print((char)(x+i+j));
			}
			System.out.println();
		}
	}
}
```

Code : Interesting Alphabets

Send Feedback

Print the following pattern for the given number of rows.

Pattern for N = 5

E
DE
CDE
BCDE
ABCDE

Input format :

N (Total no. of rows)

Output format :

Pattern in N lines

Constraints

0 <= N <= 26

Sample Input 1:

8

Sample Output 1:

H
GH
FGH
EFGH
DEFGH
CDEFGH
BCDEFGH
ABCDEFGH

Sample Input 2:

7

Sample Output 2:

G
FG
EFG
DEFG
CDEFG
BCDEFG
ABCDEFG

```
import java.util.Scanner;
public class Solution {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		int n = sc.nextInt();
		char x = 'A';
		for(int i=n-1; i>=0; i--){
			for(int j=0; j<n-i; j++){
```

```
                    System.out.print((char)(x+i+j));
                }
                System.out.println();
            }
        }
}
```