

Topics to discuss

- Print Number Patterns

Top 20 Number Pattern
with code

1. Pattern 1

11111
22222
33333
44444
55555

2. Pattern 2

12345
12345
12345
12345
12345

3. Pattern 3

1
22
333
4444
55555

4. Pattern 4

1
12
123
1234
12345

5. Pattern 5

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

6. Pattern 6

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

7. Pattern 7

12345
1234
123
12
1

8. Pattern 8

1
2 3
4 5 6
7 8 9 10
11 12 13 14 15

9. Pattern 9

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

10. Pattern 10

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

11. Pattern 11

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

12. Pattern 12

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

13. Pattern 13

1
0 1
1 0 1
0 1 0 1
1 0 1 0 1

14. Pattern 14

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

15. Pattern 15

1
1 1
1 2 1
1 3 3 1

16. Pattern 16

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

17. Pattern 17

123456
234561
345612
456123
561234
612345

18. Pattern 18

1
2 6
3 7 10
4 8 11 13
5 9 12 14 15

19. Pattern 19

10101
01010
10101
01010
10101

20. Pattern 20

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

① Number Pattern 1 :

```
static void solution(int row, int col){  
    for (int i=1 ; i<= row ; i++){  
        for (int j=1 ; j<= col ; j++){  
            system.out.print(i);  
        }  
        system.out.println();  
    }  
}
```

Outer for loop \rightarrow No. of rows
Inner for loop \rightarrow No. of columns.

I/p : row = 5
col = 5

O/p :

```
11111  
22222  
33333  
44444  
55555
```

② Number Pattern 2 :

```
static void solution(int row, int col){  
    for (int i=1 ; i<= row ; i++){  
        for (int j=1 ; j<= col ; j++){  
            system.out.print(j);  
        }  
        system.out.println();  
    }  
}
```

I/p : row = 5
col = 5

O/p :

```
12345  
12345  
12345  
12345  
12345
```

③ Number Pattern 3 :

```
static void solution(int row){  
    for (int i=1 ; i<=row ; i++){  
        for (int j=1 ; j<=i ; j++){  
            System.out.print(i);  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

```
1  
22  
333  
4444  
55555
```

④ Number Pattern4 :

```
static void solution(int row){  
    for (int i=1 ; i<=row ; i++){  
        for (int j=1 ; j<=i ; j++){  
            System.out.print(j);  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

```
1  
12  
123  
1234  
12345
```

⑤ Number Pattern 5 :

```
static void solution(int row){
    for (int i=1 ; i<=row ; i++){
        for (int j=row-1 ; j>=i ; j--){
            System.out.print(" ");
        }
        for (int j=1 ; j<=i ; j++){
            System.out.print(j+" ");
        }
        System.out.println();
    }
}
```

I/p : row = 5

O/p :

```
    1
   1 2
  1 2 3
 1 2 3 4
1 2 3 4 5
```

⑥ Number Pattern 6 :

```
static void solution(int row){  
    for (int i=1 ; i<=row ; i++){  
        for (int j=row-1 ; j>=i ; j--){  
            System.out.print(" ");  
        }  
        for (int j=1 ; j<=i ; j++){  
            System.out.print(i + " ");  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

```
    1  
   2 2  
  3 3 3  
 4 4 4 4  
5 5 5 5 5
```


⑦ Number Pattern 7 :

```
static void solution(int row){  
    for (int i=row; i>=1; i--){  
        for (int j=1; j<=i; j++){  
            System.out.print(j);  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

```
12345  
1234  
123  
12  
1
```

8 Number Pattern 8 :

```
static void solution(int row) {  
    int n = 1;  
    for (int i = 1; i <= row; i++) {  
        for (int j = 1; j <= i; j++) {  
            System.out.print(n + " ")  
            n++;  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

```
1  
2 3  
4 5 6  
7 8 9 10  
11 12 13 14 15
```

Q) Number Pattern 9 :

```
static void solution(int row){  
    for (int i=1; i<=row; i++){  
        for (int j=1; j<i; j++){  
            System.out.print(" ");  
        }  
        for (int j=row; j>=i; j--){  
            System.out.print(j+" ");  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

```
5 4 3 2 1  
 5 4 3 2  
   5 4 3  
    5 4  
     5
```

(10) Number Pattern 10 :

```
Static void solution(int row){  
    for (int i=1; i<=row; i++){  
        for (int j=1; j<i; j++){  
            System.out.print(" ");  
        }  
        for (int j=i; j<=row; j++){  
            System.out.print(j+" ");  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

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

⑪ Number Pattern II :

```
Static void solution(int row){  
    for (int i=1; i<=row; i++) {  
        for (int j=row; j>i; j--) {  
            System.out.print(" ");  
        }  
        for (int j=i; j>=1; j--) {  
            System.out.print(j+" ");  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

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

(12) Number Pattern 12 :

```
static void solution(int row){  
    for (int i=1; i<=row; i++){  
        for (int j=row; j>i; j--){  
            System.out.print(" ");  
        }  
        for (int j=i; j>=1; j--){  
            System.out.print(j+" ");  
        }  
        for (int j=2; j<=i; j++){  
            System.out.print(j+" ");  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

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

⑬ Number Pattern 13 :

```
static void solution(int row){  
    for (int i=1 ; i<=row ; i++){  
        for (int j=1 ; j<=i ; j++){  
            if ((i+j) % 2 == 0)  
                System.out.print (1 + " ");  
            else  
                System.out.print (0 + " ");  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 5

O/p :

```
1  
0 1  
1 0 1  
0 1 0 1  
1 0 1 0 1
```

(14) Number Pattern 14 :

```
static void solution(int row){
    for (int i=1; i<=row; i++){
        for (int j=1; j<i; j++){
            System.out.print(" ");
        }
        for (int j=i; j<=row; j++){
            System.out.print(j+" ");
        }
        System.out.println();
    }

    for (int i=row-1; i>=1; i--){
        for (int j=1; j<i; j++){
            System.out.print(" ");
        }
        for (int j=i; j<=row; j++){
            System.out.print(j+" ");
        }
        System.out.println();
    }
}
```

I/p : row = 5

O/p :

```
1 2 3 4 5
 2 3 4 5
   3 4 5
    4 5
     5
    4 5
   3 4 5
  2 3 4 5
 1 2 3 4 5
```


(15) Number Pattern 15 :

I/p : row = 5

O/p :

```

    1
  1 1
 1 2 1
1 3 3 1

```

j =	1	2	3	4
i = 1	x	x	x	①
2	x	x	①	①
3	x	①	②	1
4	1	3	3	1

i = 3 j = 1
x = 1

$$x = 1 \times \frac{2}{1} = 2$$

i = 3 j = 2
x = 2

$$x = 2 \times \frac{(3-2)}{2} = 1$$

```

static void solution(int row){
    for (int i=1; i<=row; i++){
        for (int j=row; j>i; j--){
            System.out.print(" ");
        }
        int x=1;
        for (int j=1; j<=i; j++){
            System.out.print(x + " ");
            x = x * (i-j) / j;
        }
        System.out.println();
    }
}

```

16) Number Pattern 16 :

```
static void solution (int row){  
    for (int i=1 ; i<=row ; i++){  
        for (int j=1 ; j<=i ; j++){  
            System.out.print (j + " ");  
        }  
        System.out.println ();  
    }  
    for (int i=row-1 ; i>=1 ; i--){  
        for (int j=1 ; j<=i ; j++){  
            System.out.print (j + " ");  
        }  
        System.out.println ();  
    }  
}
```

I/p : row = 5

O/p :

```
1  
1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5  
1 2 3 4  
1 2 3  
1 2  
1
```

(17) Number Pattern 17 :

```
Static void solution (int row) {  
    for (int i = 1; i <= row; i++) {  
        for (int j = i; j <= row; j++) {  
            System.out.print (j);  
        }  
        for (int j = 2; j <= i; j++) {  
            System.out.print (j-1);  
        }  
        System.out.println();  
    }  
}
```

I/p : row = 6

O/p :

```
123456  
234561  
345612  
456123  
561234  
612345
```

(18) Number Pattern 18 :

```
Static void solution (int row) {  
    for (int i = 1; i <= row; i++) {  
        int num = i;  
        for (int j = 1; j <= i; j++) {  
            System.out.print (num + " ");  
            num = num + row - j;  
        }  
        System.out.println()  
    }  
}
```

I/p : row = 5

O/p :

1				
2	6			
3	7	10		
4	8	11	13	
5	9	12	14	15

(19) Number Pattern 19 :

```
static void solution (int row) {  
    for (int i=1 ; i<=row ; i++) {  
        int n ;  
        if (i%2 == 0) {  
            n=0 ;  
            for (int j=1 ; j<=col ; j++) {  
                System.out.print(n) ;  
                n = (n==0) ? 1 : 0 ;  
            }  
        }  
        else {  
            n=1 ;  
            for (int j=1 ; j<=col ; j++) {  
                System.out.print(n) ;  
                n = (n==0) ? 1 : 0 ;  
            }  
        }  
        System.out.println() ;  
    }  
}
```

I/p : row = 5
col = 5

O/p :

```
10101  
01010  
10101  
01010  
10101
```

(20) Number Pattern 20

```
static void solution (int row) {  
    for (int i=1 ; i<=row ; i++) {  
        for (int j=1 ; j<=i ; j++) {  
            System.out.print (j + " ");  
        }  
        for (int j=i-1 ; j>=1 ; j--) {  
            System.out.print (j + " ");  
        }  
        System.out.println ();  
    }  
}
```

I/p : row = 5

O/p

```
1  
1 2 1  
1 2 3 2 1  
1 2 3 4 3 2 1  
1 2 3 4 5 4 3 2 1
```

Follow Now



Start Practicing



i._am._arfin



Arfin Parween



arfin-parween