

Pattern

1. If $n=4$,

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

▼ Ans

```
public static void main(String arg[])  
{  
    Scanner kd = new Scanner(System.in);  
    System.out.print("Enter the number= ");  
    int n=kd.nextInt();kd.close();  
  
    for(int i=1; i<=n; i++)  
    {  
        for(int j=1; j<=n; j++)  
        {  
            System.out.print("* ");  
        }  
        System.out.println();  
    }  
}
```

86. if $n=5$,

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

▼ Ans

```
public static void main(String arg[])  
{  
    Scanner kd = new Scanner(System.in);  
    System.out.print("Enter the number= ");  
    int n=kd.nextInt();kd.close();
```

```

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

```

87. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();ks.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n; j++)
        {
            System.out.print(i+" ");
        }
        System.out.println();
    }
}

```

88. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=n; j>0; j--)
        {
            System.out.print(j+" ");
        }
        System.out.println();
    }
}

```

89. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=n; i>0; i--)
    {
        for(int j=1; j<=n; j++)
        {
            System.out.print(i+" ");
        }
        System.out.println();
    }
}

```

90. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();ks.close();

    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n; j++)
        {
            System.out.print(j%2+" ");
        }
        System.out.println();
    }
}

```

91. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();ks.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n; j++)
        {
            System.out.print(i%2+" ");
        }
        System.out.println();
    }
}

```

```

    }
}

```

92. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    int x=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n; j++)
        {
            System.out.print(x%2+" ");
            x++;
        }
        System.out.println();
    }
}

```

93. If n=5,

```

A B C D E
A B C D E
A B C D E
A B C D E
A B C D E

```

▼ Ans

```

public static void main(String[] args)
{
    int n=5;

    for (int i = 0; i<n; i++)

```

```

    {
        for (int j = 0; j<n; j++)
        {
            System.out.print((char)(j+65)+" ");
        }
        System.out.println();
    }
}

```

94. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print("* ");
        }
        System.out.println();
    }
}

```

95. If n=5,

```

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

```

▼ Ans

```

public static void main(String[] args)
{
    int n=5;

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

```

96. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print(j+" ");
        }
        System.out.println();
    }
}

```

97. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print(i+" ");
        }
        System.out.println();
    }
}

```

98. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=n; i>0; i--)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print(i+" ");
        }
        System.out.println();
    }
}

```



```
}
}
```

99. If n=5,

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

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print(i%2+" ");
        }
        System.out.println();
    }
}
```

00. If n=5,

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

▼ Ans

```
public static void main(String[] args)
{
    int n=5;

    for (int i = n; i>=1; i--)
    {
        for (int j = 1; j <=i; j++)
```

```

        {
            System.out.print(i%2+" ");
        }
        System.out.println();
    }
}

```

01. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print(j%2+" ");
        }
        System.out.println();
    }
}

```

02. If n=5,

```

a
a b
a b c
a b c d
a b c d e

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);

```

```

System.out.print("Enter the number= ");
int n=kd.nextInt();kd.close();
for(int i=1; i<=n; i++)
{
    for(int j=1; j<=i; j++)
    {
        System.out.print((char)(j+96)+" ");
    }
    System.out.println();
}

```

03. If n=5,

```

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

```

▼ Ans

```

int n=5; //Input
int x=1;
for(int i=1; i<=n; i++)
{
    for(int j=1; j<=i; j++)
    {
        System.out.print(x+" ");
        x++;
    }
    System.out.println();
}

```

04. If n=5,

```

1
2 3
4 5 6
7 8 9 1
2 3 4 5 6

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    int x=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print(x+" ");
            x++;
            if(x==10)
                x=1;
        }
        System.out.println();
    }
}

```

05. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    int x=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print(x%2+" ");
            x++;
        }
        System.out.println();
    }
}

```

28. If n=5,

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

▼ Ans

```
int n=5;
for(int i=1; i<=n; i++)
{
    int x=i;
    for(int j=1; j<=i; j++)
    {
        System.out.print(x+" ");
        x=x+n-j;
    }
    System.out.println();
}
```

29. If n=5,

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

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=n; i>0; i--)
    {
        for(int j=i; j>0; j--)
        {
            System.out.print(j+" ");
        }
        System.out.println();
    }
}
```

```
}
}
```

30. If n=5,

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

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=n; i>0; i--)
    {
        for(int j=1; j<=i; j++)
        {
            System.out.print(j+" ");
        }
        System.out.println();
    }
}
```

31. If n=5,

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

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd = new Scanner(System.in);
    System.out.print("Enter the number= ");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
```

```

    {
        for(int j=i; j<=n; j++)
        {
            System.out.print(j+" ");
        }
        System.out.println();
    }
}

```

32. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=i; k++)
        {
            System.out.print("* ");
        }
        System.out.println();
    }
}

```

25. If n=5,

```

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

```

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<i; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=n-i+1; k++)
        {
            System.out.print("* ");
        }
        System.out.println();
    }
}
```

11. If n=5,

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

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=n; i>0; i--)
    {
        for(int j=1; j<=n-i; j++)
        {
            System.out.print(" ");
        }
        for(int k=i; k>0; k--)
        {
            System.out.print(k+" ");
        }
        System.out.println();
    }
}
```



```
}
}
```

12. If n=5,

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

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<i; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=n-i+1; k++)
        {
            System.out.print(k+" ");
        }
        System.out.println();
    }
}
```

13. If n=5,

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

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<i; j++)
        {
            System.out.print(" ");
        }
        for(int k=i; k<=n; k++)
        {
            System.out.print(k+" ");
        }
        System.out.println();
    }
}

```

14. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<i; j++)
        {
            System.out.print(" ");
        }
        for(int k=n; k>=i; k--)
        {
            System.out.print(k+" ");
        }
        System.out.println();
    }
}

```

15. If n=5,

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

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kdclose();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i; j++)
        {
            System.out.print(" ");
        }
        for(int k=i; k>0; k--)
        {
            System.out.print(k+" ");
        }
        System.out.println();
    }
}
```

16. If n=5,

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

▼ Ans

```
public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
```

```

        {
            for(int j=1; j<=n-i; j++)
            {
                System.out.print(" ");
            }
            for(int k=i; k>0; k--)
            {
                System.out.print(i+" ");
            }
            System.out.println();
        }
    }
}

```

17. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();ks.close();
    for(int i=n; i>0; i--)
    {
        for(int j=1; j<=i-1; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=n-i+1; k++)
        {
            System.out.print(i+" ");
        }
        System.out.println();
    }
}

```

22. If n=5,

```

      A
    A B
  A B C
A B C D
A B C D E

```

▼ Ans

```

public static void main(String arg[])
{
    int n=5;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=i; k++)
        {
            System.out.print((char)(k+64)+" ");
        }
        System.out.println();
    }
}

```

27. If n=5,

```

      A
    B A
  C B A
D C B A
E D C B A

```

▼ Ans

```

    int n=5;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i; j++)
        {
            System.out.print(" ");
        }

        for(int k=i; k>0; k--)
        {
            System.out.print((char)(k+64)+" ");
        }
    }

```

```

    }
    System.out.println();
}

```

28. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=2*i-1; k++)
        {
            System.out.print("* ");
        }
        System.out.println();
    }
}

```

10. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{

```

```

Scanner kd=new Scanner(System.in);
System.out.println("Enter the one inetger number =");
int n=kd.nextInt();kd.close();
for(int i=1; i<=n; i++)
{
    for(int j=1; j<i; j++)
    {
        System.out.print(" ");
    }
    for(int k=i; k<=2*n-i; k++)
    {
        System.out.print("* ");
    }
    System.out.println();
}
}

```

18. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=2*i-1; k++)
        {
            System.out.print(k%2+" ");
        }
        System.out.println();
    }
}

```

19. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();ks.close();
    int x=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i; j++)
        {
            System.out.print(" ");
        }

        for(int k=1; k<=2*i-1; k++)
        {
            System.out.print(x%2+" ");
            x++;
        }
        System.out.println();
    }
}

```

20. If n=5,

```

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

```

▼ Ans

```

public static void main(String arg[])
{
    Scanner kd=new Scanner(System.in);
    System.out.println("Enter the one inetger number =");
    int n=kd.nextInt();kd.close();
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=n-i; j++)
        {

```



```

        System.out.print(" ");
    }

    for(int k=1; k<=i; k++)
    {
        System.out.print(k+" ");
        if(k<i)
            System.out.print("* ");
    }
    System.out.println();
}
}

```

21. If n=5,

```

    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

```

▼ Ans

```

for(int i=1; i<=n; i++)
{
    for (int j=1; j<=n-i; j++)
    {
        System.out.print(" ");
    }
    int x=1;
    for (int k=1; k<=2*i-1; k++)
    {
        System.out.print(x+" ");
        if(k<i)
            x++;
        else
            x--;
    }
    System.out.println();
}

```

23. If n=5,

```

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

```

▼ Ans

```
int n=5,sp=1;
for(int i=n; i>=0; i--)
{
    int num=sp;
    for(int j=1; j<=sp-1; j++)
    {
        System.out.print(" ");
    }
    for(int k=1; k<=2*i-1; k++)
    {
        System.out.print(num+" ");
        if(num<n)
            num++;
        else
            num--;
    }
    sp++;
    System.out.println();
}
```

24. If n=5,

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

▼ Ans

```
for(int i=n; i>0; i--)
{
    for(int j=1; j<=n-i; j++)
    {
        System.out.print(" ");
    }
    int x=1;
    for(int k=1; k<=2*i-1; k++)
    {
        System.out.print(x+" ");
        if(k<i)
            x++;
        else
            x--;
    }
    System.out.println();
}
```

25. If n=5,

```
  a
 a b a
a b c b a
a b c d c b a
a b c d e d c b a
```

▼ Ans

```
int n=5;
for(int i=1; i<=n; i++)
{
    for(int j=1; j<=n-i; j++)
    {
        System.out.print(" ");
    }
    int x=1;
    for(int k=1; k<=2*i-1; k++)
    {
        System.out.print((char)(x+96)+" ");
        if(k<i)
            x++;
        else
            x--;
    }
    System.out.println();
}
```

26. If n=5,

```
  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
```

▼ Ans

```
int n=5;
for(int i=1; i<=n; i++)
{
    for(int j=1; j<=n-i; j++)
    {
        System.out.print(" ");
    }
}
```

```

int x=i;
for(int k=1; k<=2*i-1; k++)
{
    System.out.print(x+" ");
    if(k<i)
        x--;
    else
        x++;
}
System.out.println();
}

```

2. If n=7

```

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

```

▼ Ans

```

public static void main(String[] args)
{
    int n=7,sp=n/2,x=0;
    for(int i=0; i<=n/2; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=2*i+1; k++)
        {
            System.out.print(x%2+" ");
            x++;
        }
        sp--;
        System.out.println();
    }
}

```

29. If n=5,

```

    1
   1 1
  1 2 1
 1 3 3 1
1 4 6 4 1

```

▼ Ans

- Pascal pattern, We should Remember the formula

```

int n=5;
for(int i=1; i<=n; i++)
{
    for(int j=1; j<=n-i; j++)
    {
        System.out.print(" ");
    }
    int x=1;
    for(int k=1; k<=i; k++)
    {
        System.out.print(x+" ");
        x=x*(i-k)/k;
    }
    System.out.println();
}

```

30. If n=5 or n=7

```

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

```

▼ Ans

```

{
    int n=7;
    int space=n/2,star=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=space; j++)
        {
            System.out.print(" ");
        }
    }
}

```

```

    }
    for(int k=1; k<=star; k++)
    {
        System.out.print("* ");
    }
    if(i<=n/2)
    {
        space--;
        star=star+2;
    }
    else
    {
        space++;
        star=star-2;
    }
    System.out.println();
}
}

```

31. If n=7



▼ Ans

```

{
    int n=7;
    int sp=n/2,st=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=st; k++)
        {
            if(k==1||k==st)
                System.out.print("* ");
            else
                System.out.print(" ");
        }
        if(i<=n/2)
        {
            sp--;

```

```

        st=st+2;
    }
    else
    {
        sp++;
        st=st-2;
    }
    System.out.println();
}

```

32. If n=7

```

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

```

▼ Ans

```

{
    int n=7;
    int sp=0,st=n;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        for(int k=1; k<=st; k++)
        {
            System.out.print("* ");
        }
        if(i<=n/2)
        {
            sp++;
            st=st-2;
        }
        else
        {
            sp--;
            st=st+2;
        }
        System.out.println();
    }
}

```

33. If n=7

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

▼ Ans

```
{
    int n=7;
    int sp=n/2,st=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        int x=1;
        for(int j=1; j<=st; j++)
        {
            System.out.print(x+" ");
            if(j<=st/2)
                x++;
            else
                x--;
        }
        if(i<=n/2)
        {
            sp--;
            st=st+2;
        }
        else
        {
            sp++;
            st=st-2;
        }
        System.out.println();
    }
}
```

34. If n=7


```

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

```

▼ Ans

```

{
    int n=7;
    int sp=n/2,st=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        int x=st/2+1;
        for(int j=1; j<=st; j++)
        {
            System.out.print(x+" ");
            if(j<=st/2)
                x--;
            else
                x++;
        }
        if(i<=n/2)
        {
            sp--;
            st=st+2;
        }
        else
        {
            sp++;
            st=st-2;
        }
        System.out.println();
    }
}

```

35. If n=7

```

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

```

▼ Ans

```

{
    int n=7;
    int sp=n/2,st=1;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        int x=st/2+1;
        for(int j=1; j<=st; j++)
        {
            System.out.print(x%2+" ");
            if(j<=st/2)
                x--;
            else
                x++;
        }
        if(i<=n/2)
        {
            sp--;
            st=st+2;
        }
        else
        {
            sp++;
            st=st-2;
        }
        System.out.println();
    }
}

```

36. If n=7

```

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

```

▼ Ans

```

{
    int n=7;
    int sp=0,st=n;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        int x=sp+1;
        for(int j=1; j<=st; j++)
        {
            System.out.print(x+" ");
            if(j<=st/2)
                x++;
            else
                x--;
        }
        if(i<=n/2)
        {
            sp++;
            st=st-2;
        }
        else
        {
            sp--;
            st=st+2;
        }
        System.out.println();
    }
}

```

37. If $n=7$

```

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

```

▼ Ans

```

int n=9;
for(int i=1; i<=n; i++)
{
    for(int j=1; j<=n; j++)
    {
        if(j==1||j==n||i==1||i==n||i==j||i+j==n+1)
            System.out.print("*"+" ");
        else
            System.out.print("  ");
    }
    System.out.println();
}

```

38. If n=9

```

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

```

▼ Ans

```

int n=9;
for(int i=1; i<=n; i++)
{
    for(int j=1; j<=n; j++)
    {
        if(j==1||j==n||i==1||i==n||i==j||i+j==n+1)
            System.out.print("*"+" ");
        else
            System.out.print("  ");
    }
    System.out.println();
}

```

3. If n=3,

```
1 2 3 2 1
1 2   2 1
1     1
```

▼ Ans

```
public static void main(String[] args)
{
    int n=3;
    for(int i=n; i>0; i--)
    {
        int x=1;
        for(int j=1; j<2*n; j++)
        {
            if(x<=i)
                System.out.print(x+" ");
            else
                System.out.print("  ");
            if(j<n)
                x++;
            else
                x--;
        }
        System.out.println();
    }
}
```

6. If n=3,

```
1       1
1 2     2 1
1 2 3 2 1
```

▼ Ans

```
public static void main(String[] args)
{
    int n=3;
    int sp=(n-1)*2-1;
    int p;
    for(int i=1; i<=n; i++)
```

```

    {
        for(int j=1; j<=i; j++)
            System.out.print(j+" ");
        for(int k=1; k<=sp; k++)
            System.out.print(" ");

        sp=sp-2;
        if(i==n)
            p=i-1;
        else
            p=i;
        for(int m=p; m>=1; m--)
            System.out.print(m+" ");
        System.out.println();
    }
}

```

4. If n=5,

```

    *
  * *
*   *
  * *
    *

```

▼ Ans

```

public static void main(String[] args)
{
    int n=5;
    int sp=n/2,st=0;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        for(int j=1; j<=2*st+1; j++)
        {
            if(j==1 || j==(2*st+1))
                System.out.print("* ");
            else
                System.out.print(" ");
        }
        if(i<(n/2+1))
        {
            sp--;
            st++;
        }
    }
}

```

```

    }
    else
    {
        sp++;
        st--;
    }
    System.out.println();
}
}

```

5. If n=5,

```

A B C D E
  B C D
    C
  B C D
A B C D E

```

▼ Ans

```

public static void main(String[] args)
{
    int n=5;
    int sp=0,st=n;
    for(int i=1; i<=n; i++)
    {
        for(int j=1; j<=sp; j++)
        {
            System.out.print(" ");
        }
        int x=64+sp;
        for(int j=1; j<=st; j++)
        {
            System.out.print((char)(x+j)+" ");
        }
        if(i<=n/2)
        {
            sp++;
            st=st-2;
        }
        else
        {
            sp--;
            st=st+2;
        }
        System.out.println(" ");
    }
}

```

7. If n=5,

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

▼ Ans

```
public static void main(String[] args)
{
    int n=5;
    int sp=1;
    int st=n/2;
    for(int i=1; i<=n; i++)
    {
        if(i==1||i==n)
            for(int j=1; j<=n; j++)
            {
                System.out.print("* ");
            }
        else
        {
            for(int k=1; k<=st; k++)
            {
                System.out.print("* ");
            }
            for(int m=1; m<=sp; m++)
            {
                System.out.print(" ");
            }
            for(int p=1; p<=st; p++)
            {
                System.out.print("* ");
            }
            if(i<=n/2)
            {
                sp=sp+2;
                st--;
            }
            else
            {
                sp=sp-2;
                st++;
            }
        }
        System.out.println();
    }
}
```


12. If $n=5$,

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

▼ Ans

16. WJPT to print (n=5)

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

▼ Ans

```

8 5 5 5 5
5 4 4 4 4
5 4 3 3 3
5 4 3 2 2
5 4 3 2 1

```

NAME _____

```

for (int i = 1; i <= n; i++)
{
    for (int j = 1; j <= i; j++)
    {
        cout << j << " ";
    }
    cout << "\n";
}
}
return 0;
}

```

17. If $n=5$

```

1 2 3 4 5
6 7 8 9
1 2 3
4 5
6

```

▼ Ans

18. WJPT n=16,

```

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

```

▼ Ans

25. WJPT

```

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

```

▼ Ans

66.WJPT to print pattern (n=9)

```

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

```

▼ Ans

67. If n=5

```

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

```

▼ Ans

68. Fibonacci

```
1). Print the Fibonacci Series in the given pattern ?  
Note: Don't use Built in functions  
Input1:- 5  
Input2:- 1  
Input3:- 2  
  
1         2  
3         5  
8        13  
21       34  
55
```

▼ Ans

```
public static void main(String args[])  
{  
    Scanner sc=new Scanner(System.in);  
    int n = sc.nextInt();  
    int a=sc.nextInt(),b=sc.nextInt(),c=0;  
    sc.close();  
  
    for (int i = n - 1; i >= 0; i--)  
    {  
        for (int j = n - 1; j > i; j--)  
        {  
            System.out.print(" ");  
        }  
        if(i==(n-1))  
        {  
            c=a;  
        }else  
        {  
            c=a+b;  
            a=b;  
            b=c;  
        }  
        System.out.print(c);  
  
        for (int j=1; j<(i*2); j++)  
            System.out.print(" ");  
  
        if(i==(n-1))  
        {  
            c=b;  
        }else  
        {  
            c=a+b;  
            a=b;  
            b=c;  
        }  
        if (i >= 1)  
            System.out.println(c);  
    }  
}
```

```
}  
}
```

29. Fibonacci

```
2). Print the Fibonacci Series in the given pattern ?  
Note: Don't use Built in functions  
Input1:- 5  
Input2:- 1  
Input3:- 2  
  
34      55  
13      21  
5        8  
2 3  
1
```

▼ Ans

29. Fibonacci

```
3). Print the Fibonacci Series in the given pattern ?  
Note: Don't use Built in functions  
Input1:- 7  
Input2:- 1  
Input3:- 2  
  
1      2  
3      5  
8 13  
21
```

▼ Ans

29. Fibonacci

```
4). Print the Fibonacci Series in the given pattern ?  
Note: Don't use Built in functions  
Input1:- 7  
Input2:- 1  
Input3:- 2  
  
13      21  
5        8  
2 3  
1
```

▼ Ans

29. Fibonacci

```

5). Print the Fibonacci Series in the given pattern ?
Note: Don't use Built in functions
Input1:- 5
Input2:- 1
Input3:- 2

      34
     13
    5
   2
  1
 3
 8
21
55

```

▼ Ans

29. Fibonacci

```

6). Print the Fibonacci Series in the given pattern ?
Note: Don't use Built in functions
Input1:- 5
Input2:- 1
Input3:- 2

      1
     3
    8
   21
  55
 34
13
5
2

```

▼ Ans

29. Fibonacci

```

7). Print the Fibonacci Series in the given pattern ?
Note: Don't use Built in functions
Input1:- 7
Input2:- 1
Input3:- 2

      13
     5
    2
   1
  3
 8
21

```

▼ Ans

29. Fibonacci

```

8). Print the Fibonacci Series in the given pattern ?
Note: Don't use Built in functions
Input1:- 7
Input2:- 1
Input3:- 2

      1
     3
    8
   21
  13
   5
    2

```

▼ Ans

29. Fibonacci

```
9). Print the Fibonacci Series in the given pattern ?  
Note: Don't use Built in functions  
Input1:- 5  
Input2:- 1  
Input3:- 2  
  
1  
3  
8  
21  
55  
34  
13  
5  
2
```

▼ Ans

29. Fibonacci

```
10). Print the Fibonacci Series in the given pattern ?  
Note: Don't use Built in functions  
Input1:- 5  
Input2:- 1  
Input3:- 2  
  
34  
13  
5  
2  
1  
3  
8  
21  
55
```

▼ Ans

29. Fibonacci

```
11). Print the Fibonacci Series in the given pattern ?  
Note: Don't use Built in functions  
Input1:- 7  
Input2:- 1  
Input3:- 2  
  
1  
3  
8  
21  
13  
5  
2
```

▼ Ans

29. Fibonacci

```

12). Print the Fibonacci Series in the given pattern ?
Note: Don't use Built in functions
Input1:- 7
Input2:- 1
Input3:- 2

13
  5
    2
      1
        3
          8
            21

```

▼ Ans

29. Fibonacci

```

13). Print the Fibonacci Series in the given pattern ?
Note: Don't use Built in functions
Input1:- 5
Input2:- 1
Input3:- 2

      1
     2 3
    5  8
   13   21
  34    55

```

▼ Ans

29. Fibonacci

```

14). Print the Fibonacci Series in the given pattern ?
Note: Don't use Built in functions
Input1:- 5
Input2:- 1
Input3:- 2

      55
     21 34
    8   13
   3    5
  1     2

```

▼ Ans

29. Fibonacci

```

15). Print the Fibonacci Series in the given pattern ?
Note: Don't use Built in functions
Input1:- 7
Input2:- 1
Input3:- 2

      1
     2 3
    5  8
   13   21

```

▼ Ans

29. Fibonacci

```
16). Print the Fibonacci Series in the given pattern ?  
Note: Don't use Built in functions  
Input1:- 7  
Input2:- 1  
Input3:- 2  
  
      21  
    8  13  
  3    5  
1      2
```

▼ Ans