

Q1. WAP to print Alphabets A,B,C,D,E,F,G,H, using pattern programming logic.

Ans.

```
Class alpha{
    public static void main(String[] args) {
        char ch='A';
        for(int row=1;row<=8;row++)
        {
            {
                for(int col=row;col<=row;col++)
                {
                    System.out.print(ch+",");
                    ch++;
                }
            }
        }
    }
}
```

Output: A,B,C,D,E,F,G,H,

Q2. WAP to print triangle using star pattern programming logic.

Ans.

```
import java.util.*;
class triangle
{
    public static void main(String args[])
    {System.out.println("Enter number to print triangle");
        Scanner scan=new Scanner(System.in);
        int n=scan.nextInt();
int k;
if(n%2==0)
{
    k=n;
}
else
{
    k=n+1;
}

        for(int row=1;row<k;row++)
```

Output:Enter number to print triangle 30

\_\_\_\_\_

**Ans.**

\_\_\_\_\_



```

        for (int col = 1; col <= n; col++) {
            if (col ==
1 || (row==1&&col<n-1) || (col==n-1&&row>1&&row<n/2) || (row==n/2&&col<n-1) )
                System.out.print("*");
            else
                System.out.print(" ");
        } // w
        System.out.print(" ");
        for (int col = 1; col <= n; col++) {
            if (col == 1 || col == n
|| (row>n/2&&col==row) || (row>n/2&&col+row==n+1) || (row==n/2&&col==n/2))
                System.out.print("*");
            else
                System.out.print(" ");
        }
        // s
        System.out.print(" ");
        for (int col = 1; col <= n; col++) {
            if ((row == 1 && col > 1&&col<n) || (row == 2&&col==n) ||
(row > 1 && row < n / 2 && col == 1)
|| (row==n/2&&col>2&&col<n-1)
|| (row == n-1&&col==1) || (row == n&&col>1 && col <
n) || (row > n / 2 && col == n && row < n))
                System.out.print("*");
            else
                System.out.print(" ");
        }
        // K
        System.out.print(" ");
        for (int col = 1; col <= n; col++) {
            if ((col<n&&row<=n/2&&row+col==n) || (col
==1) || (col<=n&&row>n/2&&col==row))
                System.out.print("*");
            else
                System.out.print(" ");
        }
        // I
        System.out.print(" ");
        for (int col = 1; col <= n; col++) {
            if (col == n / 2)

```

```

        System.out.print("*");
    else
        System.out.print(" ");
    } // L
    System.out.print(" ");
    for (int col = 1; col <= n; col++) {
        if (col == 1 || (row == n))
            System.out.print("*");
        else
            System.out.print(" ");
    } // L
    System.out.print(" ");
    for (int col = 1; col <= n; col++) {
        if (col == 1 || (row == n))
            System.out.print("*");
        else
            System.out.print(" ");
    }
    // S
    System.out.print(" ");
    for (int col = 1; col <= n; col++) {
        if ((row == 1 && col > 1&&col<n) || (row == 2&&col==n) ||
(row > 1 && row < n / 2 && col == 1)
        || (row==n/2&&col>2&&col<n-1)
        || (row == n-1&&col==1) || (row == n&&col>1 && col <
n) || (row > n / 2 && col == n && row < n))
            System.out.print("*");
        else
            System.out.print(" ");
    }
    System.out.println();

}

}

}

```

OutPut:

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

Q5. WAP to print your Full Name using pattern programming logic.

Ans. Full Name is : MOHIT JANGID

```
class Fullname {
    public static void main(String[] args) {

        int row, col, n = 8;
        for (row = 1; row <= n; row++) {
            // M
            for (col = 1; col <= n; col++) {
                if ((col == 1 && row > 1) || (col <= n / 2 && row <= n / 2
&& row == col)
                    || (col >= n / 2 && row < n / 2 && row + col == n
+ 1) || (row > 1 && col == n))
                    System.out.print("*");
                else
                    System.out.print(" ");
            } // o
            System.out.print(" ");
            for (col = 1; col <= n; col++) {
                if ((row == 1 && col > 1 && col < n) || (row == n && col >
1 && col < n)
                    || (col == 1 && row > 1 && row < n) || (col == n
&& row > 1 && row < n))
                    System.out.print("*");
                else
                    System.out.print(" ");
            }
        }
    }
}
```

```

    }
    // H
    System.out.print(" ");
    for (col = 1; col <= n; col++) {
        if ((col == 1) || col == n || row == n / 2)
            System.out.print("*");
        else
            System.out.print(" ");
    }
    // I
    System.out.print(" ");
    for (col = 1; col <= n; col++) {
        if ((row == 1) || row == n || col == n / 2)
            System.out.print("*");
        else
            System.out.print(" ");
    }
    // T
    System.out.print(" ");
    for (col = 1; col <= n; col++) {
        if ((row == 1) || col == n / 2)
            System.out.print("*");
        else
            System.out.print(" ");
    }
    System.out.println();
}

System.out.println();
int c = 0, r = 0;
for (r = 1; r <= n; r++) { // J
    for (c = 1; c <= n; c++) {
        if ((r == 1) || c == n / 2 || (c <= n / 2 && r > n / 2 &&
r - c == n / 2))
            System.out.print("*");
        else
            System.out.print(" ");
    }
    // A
    System.out.print(" ");

```

```

        for (c = 1; c <= n; c++) {
            if ((r == 1 && c > 1 && c < n) || c == 1 && r > 1 || (c ==
n && r > 1) || (r == n / 2))
                System.out.print("*");
            else
                System.out.print(" ");
        }
        // N
        System.out.print(" ");
        for (c = 1; c <= n; c++) {
            if ((c == 1) || c == n || r == c)
                System.out.print("*");
            else
                System.out.print(" ");
        }
        // G
        System.out.print(" ");
        for (c = 1; c <= n; c++) {
            if ((r == n && c > 1 && c < n) || (c == 1 && r > 1 && r <
n) || (r == 1 && c > 1)
                || (r == n / 2 && c > n / 2) || (r >= n / 2 && r <
n && c == n))
                System.out.print("*");
            else
                System.out.print(" ");
        }
        // I
        System.out.print(" ");
        for (c = 1; c <= n; c++) {
            if ((r == 1) || r == n || c == n / 2)
                System.out.print("*");
            else
                System.out.print(" ");
        }
        // D
        System.out.print(" ");
        for (c = 1; c <= n; c++) {
            if ((r == 1 && c > 1 && c < n) || c == 1 && row > 1 || c
== n && r > 1 && r < n || (r == n && c < n))
                System.out.print("*");

```



```

        else
            System.out.print(" ");
        }

        System.out.println();

    }

}

```

OUTPUT:

```

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

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

```