

ASSIGNMENT-7(29 JAN)

Q. Write a Program(WAP) to print Alphabets A, B, C, D, E, F, G, H, using pattern programming logic?

Ans- A-Pattern

```
public class pattern_A {
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        System.out.print("Enter the value of n:");
        int n= sc.nextInt();
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                if(i==0 && j>0 && j < (n-1)/2 || j==0 && i>0 || i==(n-1)/2 &&
j<=(n-1)/2 || j==(n-1)/2 && i>0 ){
                    System.out.print("*");
                }else{
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

B-Pattern

```
public class pattern_B {
    public static void main(String[] args)
    {
        int n=11;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                if(i==0 && j<(n-1)/2 || j==0 || i==(n-1) && j<(n-1)/2 ||
j==(n-1)/2 && i>0 && i<(n-1) || i==(n-1)/2 && j<(n-1)/2 )
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

```

    }
}

```

C-Pattern

```

public class pattern_C {
    public static void main(String[] args)
    {
        int n=11;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                if(i==0 && j>0 && j<(n-1)/2 || j==0 && i>0 && i<n-1 || i==n-1
&& j>0 && j<(n-1)/2)
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}

```

D-pattern

```

import java.util.*;
public class pattern_D {
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        System.out.print("Enter the value of n:");
        int n= sc.nextInt();
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                if(i==0 && j<(n-1)/2 || j==0 || j==(n-1)/2 && i>0&&i<n-1 ||
i==n-1 && j<(n-1)/2 ){
                    System.out.print("*");
                }else{
                    System.out.print(" ");
                }
            }
        }
    }
}

```

```

        System.out.println();
    }
}

```

E-pattern

```

import java.util.Scanner;

public class pattern_E {
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        System.out.print("Enter the value of n:");
        int n= sc.nextInt();
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                if(i==0 || i==(n-1)/2 || i==n-1 || j==0 ){
                    System.out.print("*");
                }else{
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}

```

F-pattern

```

import java.util.Scanner;

public class pattern_F {
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        System.out.print("Enter the value of n:");
        int n= sc.nextInt();
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                if(i==0 || i==(n-1)/2 || j==0 ){
                    System.out.print("*");
                }else{
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}

```

```

    }
}

```

H-pattern

```

public class pattern_H {
    public static void main(String[] args) {
        int n=8;
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                if (i==(n-1)/2 || j==0 || j==n-1) {
                    System.out.print("*");
                }else{
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}

```

G-Pattern

```

public class pattern_G {
    public static void main(String[] args) {
        int n=8;
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                if((j == 1 && i != 0 && i != n - 1) ||
                    ((i == 0 || i == n - 1) && j > 1 &&
                     j < n - 2) || (i == ((n - 1) / 2) &&
                     j > 2 && j < n - 1) || (j == n - 2 &&
                     i != 0 && i >= ((n - 1) / 2) && i != n - 1))
                    System.out.print("*");
                else
                    System.out.print(" ");
            }
            System.out.println();
        }
    }
}

```

Q. Write a program to print triangle using star pattern -programming logic.

Ans- Triangle-pattern

```

import java.util.Scanner;

```

```

public class pattern_triangle {
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("enter the odd num");
        int n=sc.nextInt();

        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                if(i+j==(n-1)/2 || j-i==(n-1)/2 || i==(n-1)/2 && j<n-1)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print("  ");
                }
            }
            System.out.println();
        }
    }
}

```

Q.WAP tp print—

```

Ans- public class pattern_assig {
    public static void main(String[] args)
    {
        int n=19;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                if(i==0 && j<(n-1)/2 || j==0 && i<(n-1)/2 || i+j<=(n-1)/2
||i==0 && j>(n-1)/2 ||
                j==(n-1) && i<(n-1)/2 ||j-i>=(n-1)/2 || j==0 || j==(n-1) ||
i==(n-1))
                {
                    System.out.print("*");
                }
                else
                {

```

```

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

```

Q. Write a program to -print PW SKILLS using pattern -programming logic.

Ans-

```

public class pattern_pwskills {
    public static void main(String[] args)
    {
        int n=10;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                if(i==0 && j<(n-1)/2 || j==0 || j==(n-1)/2 && i<(n-1)/2 ||
i==(n-1)/2 && j<(n-1)/2)
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }

            for(int j=0; j<n; j++)
            {
                if(j==0 || i+j==(n-1) && j<=(n-1)/2 || j==i && j>(n-1)/2 ||
j==(n-1))
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print("  ");
            for(int j=0; j<n; j++)
            {

```

```

        if(i==0 && j<(n-1)/2 && j>0 || j==0 && i<(n-1)/2 || i==(n-1)/2
&& j<(n-1)/2 ||
            j==(n-1)/2 && i>(n-2)/2 || i==(n-1) && j<(n-1)/2)
        {
            System.out.print("*");
        }
        else
        {
            System.out.print(" ");
        }
    }
    for(int j=0; j<n; j++)
    {
        if(j==0 || i+j==(n-1)/2 || i-j==(n-1)/2)
        {
            System.out.print("*");
        }
        else
        {
            System.out.print(" ");
        }
    }
    for(int j=0; j<n; j++)
    {
        if(i==0 && j<(n-1)/2 || j==(n-1)/4 || i==(n-1) && j<(n-1)/2)
        {
            System.out.print("*");
        }
        else
        {
            System.out.print(" ");
        }
    }

    for(int j=0; j<n; j++)
    {
        if(j==0 || i==(n-1) && j<=(n-1)/2)
        {
            System.out.print("*");
        }
        else
        {
            System.out.print(" ");
        }
    }
    for(int j=0; j<n; j++)
    {
        if(j==0 || i==(n-1) && j<=(n-1)/2)

```

```

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

```