

PATTERN PROGRAMMING

1. Write a program (WAP) to print the alphabet A,B,C,D,E,F,G,H using pattern programming Logic.

```
public class Pattern A
{
    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>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();
        }
    }
}
```

public class Pattern B

```
{
    public static void main(String[] args)
    {
        int n=12;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                If (j==0 || i==0 && j< (n-1)/2 || i== n-1 && j<(n-1)/2 || i==(n-1)/2 && j< (n-1)/2 ||
j==(n-1)/2 && i>0 && i<n-1)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

public class Pattern C

```
{
    public static void main(string[] args)
    {
        int n=12;
        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();
        }
    }
}
```

public class Pattern D

```
{
    public static void main(string[] args)
    {
        int n=12;
        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)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

public class Pattern E

```
{
    public static void main(string[] args)
    {
        int n=12;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                If(j==0 || i==0 && j <(n-1)/2 || i==n-1 && j<(n-1)/2 || i==(n-1)/2 && j<(n-1)/2)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

public class Pattern F

```
{
    public static void main(string[] args)
    {
        int n=12;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                If(j==0 || i==0 && j <(n-1)/2 || i==(n-1)/2 && j<(n-1)/2)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

public class Pattern G

```
{
    public static void main(string[] args)
    {
        int n=12;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                If(j==0 || i==0 && j<(n-1)/2 || i==n-1 && j<(n-1)/2 || j==(n-1)/2 && i>(n-1)/2 ||
i==(n-1)/2 && j>(n-1)/2 || j==n-1 && i>(n-1)/2)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

public class Pattern H

```
{
    public static void main(string[] args)
    {

        int n=12;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                If( j==0 || j==n-1 || i==(n-1)/2)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

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

```
public class Pattern Triangle
{
    public static void main(string[] args)
    {
        int n=12;
        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)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

3.WAP to print

public class Pattern

```
{
    public static void main(string[] args)
    {

        int n=12;
        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 || j==0 || j== n-1)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

4. Write a program to print PW SKILLS using pattern programming language.

```
public class Pattern PW SKILLS
```

```
{
    public static void main(string[] args)
    {
        int n=12;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                If( j==0 || i==0 && j<(n-1)/2 || j== (n-1)/2 && i>0 && i< (n-1)/2 || i== (n-1)/2 &&
j<(n-1)/2 )
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print(" ");
            for(int j=0; j<n; j++)
            {
                If(j==0 || j==n-1 || i+j==n-1 && j<(n-1)/2 || i==j && j>(n-1)/2 )
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print(" ");
            for(int j=0; j<n; j++)
            {
                If(i==0 && j<(n-1)/2 || i==(n-1) /2 && j<(n-1)/2 || i==n-1 && j<(n-1)/2 || j==0 &&
i<(n-1)/2 || j==(n-1)/2 && i>(n-1)/2 )
                {
                    System.out.print("* ");
                }
                else
            }
        }
    }
}
```



```

        {
            System.out.print(" ");
        }
    }
    System.out.print(" ");
    for(int j=0; j<n; j++)
    {
        If(j==0 || i+j== n-5 || i-j == n-7 )
        {
            System.out.print("* ");
        }
        else
        {
            System.out.print(" ");
        }
    }
    System.out.print(" ");
    for(int j=0; j<n; j++)
    {
        If( i==0 || i==n-1 || j==(n-1)/2 )
        {
            System.out.print("* ");
        }
        else
        {
            System.out.print(" ");
        }
    }
    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(" ");
        }
    }
    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(" ");
        }
    }
    System.out.print(" ");
    for(int j=0; j<n; j++)
    {
        if(i==0 && j<(n-1)/2 || i==(n-1)/2 && j<(n-1)/2 || i==n-1 && j<(n-1)/2 || j==0 &&
i<(n-1)/2 || j==(n-1)/2 && i>(n-1)/2
    )
        {
            System.out.print("* ");
        }
        else
        {
            System.out.print(" ");
        }
    }

    System.out.println();
}
}

```

5. Write a program to print your full name using pattern programming language.

public class Pattern RAJAH

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

        int n=19;
        for(int i=0; i<n; i++)
        {
            for(int j=0; j<n; j++)
            {
                if(j==0 || i==0 && j<(n-1)/2 || j==(n-1)/2 && i>0 && i<(n-1)/2 || i==(n-1)/2 &&
j<(n-1)/2 || i-j == n-7)
                {
                    System.out.print("* ");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print(" ");
            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.print(" ");
            for(int j=0; j<n; j++)
            {
                if(i==0 || j==(n-1)/2 || i==n-1 && j<(n-1)/2 || j==0 && i>(n-1)/2)
                {
                    System.out.print("* ");
                }
            }
        }
    }
}
```

```

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

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

    System.out.println();
}
}

```