

1) Write a program to print alphabets A,B,C,D,E,F,G,H using pattern programming logic?

Ans: `public class patternABCDEFGH`

```
{
    public static void main(String[] args)
    {
        int n = 5;
        for(int i=0;i<n;i++)
        {
            //A
            for(int j=0;j<n;j++)
            {
                if(j==(n-1)/2 && i+j == (n-1)/2 || i==(n-1)/2 || j>=n-1 &&
i>0 || j==0 && i>0)
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print("  ");
            //B
            for(int j=0;j<n;j++)
            {
                if(j==0 || i==0 && j<n-1 || i == (n-1)/2 || i==n-1 && j<n-1
|| j==n-1 && i>0 && i<n-1)
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print("  ");
            //C
            for(int j=0;j<n;j++)
            {
                if(j==0 && i>0 && i<n-1 || i==0 && j>0 || i==n-1 && j>0 &&
j<=n-1 )
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print("  ");
            //D
            for(int j=0;j<n;j++)
```

```

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

```

```

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

```

OUTPUT:

```

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

```

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

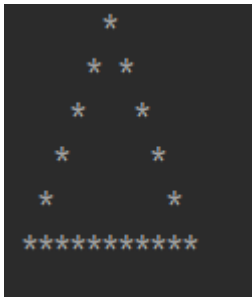
Ans: `public class` traingle

```

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

```

OUTPUT:



3) Write a program



Ans: `public class pattern`

```
{
    public static void main(String[] args)
    {
        int n = 14;
        for(int i=0;i<n;i++)
        {
            for(int j=0;j<n;j++)
            {
                if( i==0 || j-i>=(n-1)/2 || j==n-1 || i==n-1 || j==0 ||
i+j<=(n-1)/2)
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}
```

```

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

```

4) Write a program to print PW SKILLS using star pattern programming logic.

Ans: `public class patternpwwskills`

```

{
    public static void main(String[] args)
    {
        int n = 7;
        for(int i=0;i<n;i++)
        {
            //P
            for(int j=0;j<n;j++)
            {
                if(i==0 && j<n-1 || j==0 || j==n-1 && i<(n-1)/2 ||
i==(n-1)/2 )
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print(" ");
            //W
            for(int j=0;j<n;j++)
            {
                if(j==0 || j==n-1 || i==j && j>(n-1)/2 || i+j==n-1 &&
i>(n-1)/2 || i==j && j==(n-1)/2)
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.print(" ");
            //S
            for(int j=0;j<n;j++)
            {

```

```

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

```

```

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

```

OUTPUT:

```

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

```

5) Write a program to print your full name using star pattern programming logic

Ans: `public class syedubedulla`

```

{
    public static void main(String[] args)
    {
        int n = 7;
        for(int i=0;i<n;i++)
        {
            //s
            for(int j=0;j<n;j++)
            {
                if(i==0 || j==0 && i<=(n-1)/2 || i==(n-1)/2 || j==n-1 &&
i>=(n-1)/2 || i==n-1 )

```

```

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

```



```

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

```

```

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

```

```

        System.out.println();
    }
}

```

OUTPUT:

```

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

```