

1. Write a program(WAP) to print INEURON using pattern programming logic.

```
package assignment_1;

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

            for(int j=0;j<n;j++)
            {
                if(j==0 || j==n-1 || i==j)
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            for(int j=0;j<n;j++)
            {
                if((i==0 || i==n/2 || i==n-1) && j>3 || j==3)
                    System.out.print("*");
                else
                    System.out.print(" ");
            }
            for(int j=0;j<n+3;j++)
            {
                if((j==3 || j==n+2 )||(j>3 && i==n-1))
                    System.out.print("*");
                else
                    System.out.print(" ");
            }
        }
    }
}
```

```

        System.out.print(" ");
        System.out.print(" ");
        for(int j=0;j<n;j++)
        {
            if(j==0 || (i==0 && j!=n-1) || (i-4==j) ||
(j==n-1 && i>0 && i<n/2)|| (i==n/2 && j<=n/2+3) )
                System.out.print("*");
            else
                System.out.print(" ");
        }
        System.out.print(" ");
        System.out.print(" ");
        for(int j=0;j<n;j++)
        {
            if((i==0 && j>0 && j<n-1) || (i==n-1 && j>0 &&
j<n-1) || (j==0 && i>0 && i<n-1)|| (j==n-1 && i>0 && i<n-1))
                System.out.print("*");
            else
                System.out.print(" ");
        }
        System.out.print(" ");
        System.out.print(" ");
        for(int j=0;j<n;j++)
        {
            if(j==0 || j==n-1 || i==j)
            {
                System.out.print("*");
            }
            else
            {
                System.out.print(" ");
            }
        }
        System.out.println();
    }
}

```

2. Write a program to print

1 1 1 1

2 2 2 2

3 3 3 3

4 4 4 4

```
public class Main
{
    public static void main(String[] args) {
        for(int i=0;i<3;i++)
        {
            for(int j=0;j<3;j++)
            {
                System.out.print((i+1)+" ");
            }
            System.out.println();
        }
    }
}
```

3)

```
package assignment_1;

public class pattern_2 {
    public static void main(String args[])
    {
        int n=18;
        for(int i=0;i<n;i++)
        {
            for(int j=0;j<n;j++)
            {
                if((i+j)<=(n-1)/2 || (i==0) || (j-i)>=(n-
1)/2 || j==0 || j==n-1 || i==n-1)
                    System.out.print("*");
                else
                    System.out.print(" ");
            }
            System.out.println();
        }
    }
}
```

4)

```
package assignment_1;

public class pattern_1{
    public static void main(String args[])
    {
        int n=20;
        for(int i=0;i<n;i++)
        {
            for(int j=0;j<n;j++)
            {
                if((i-j) > (n-1)/2 || (i+j)>=n + (n-1)/2 )
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        for(int k=0;k<n;k++)
    }
```

```

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

```

5)

```
package assignment_1;
```

```

public class pattern_2 {
    public static void main(String args[])
    {
        int n=18;
        for(int i=0;i<n;i++)
        {
            for(int j=0;j<n;j++)
            {
                if((i+j)<(n-1)/2 || (i-j)>=(n-1)/2 || (i==0 &&
j<=n-3) || (i==n-1 && j<=n-3))
                    System.out.print("*");
                else
                    System.out.print(" ");
            }
            System.out.println();
        }
    }
}

```