

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

```
public class Launch5 {
    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 == 0 || i == n - 1 || j == n / 2) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            for(int j=0;j<2;j++) {
                System.out.print(" "); // add an extra loop to
print spaces between I and N
            }
            for(int j=0;j<n;j++) {
                if (i==j || j==0 || j==n-1 ) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            for(int j=0;j<2;j++) {
                System.out.print(" "); // add an extra loop
to print spaces between n and E
            }
            for(int j=0;j<n;j++) {
                if(i==0 || j==0 || i==(n-1)/2 || i==n-1) {
                    System.out.print("*");
                }
                else {
                    System.out.print(" ");
                }
            }
            for(int j=0;j<2;j++) {
                System.out.print(" "); // add an extra loop to
print spaces between E and u
            }
            for(int j=0;j<n;j++) {
                if(j==0 && i>=0 && i<n-1 || i==n-1 && j>0 || j==n-
1 && i<n-1) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            for(int j=0;j<2;j++) {
```

```

        System.out.print(" "); // add an extra loop to
        print spaces between U and R
    }
    for(int j=0;j<n;j++) {
        if(j==0 && i!=0 || i==0 && j!=0 ||
i==(n-1)/2 && j<n-1 || j==n-1 && i<(n-1)/2 || i==j && i>=(n-1)/2
&& j>=(n-1)/2)
        {
            System.out.print("*");
        }else {
            System.out.print(" ");
        }
    }
    for(int j=0;j<2;j++) {
        System.out.print(" "); // add an extra
        loop to print spaces between U and R
    }
    for(int j=0;j<n;j++) {
        if(i==0 || j==n-1 && i>0 || j==0 &&
i!=0 || i==n-1 && j>0) {
            System.out.print("*");
        }else {
            System.out.print(" ");
        }
    }
    for(int j=0;j<2;j++) {
        System.out.print(" "); // add an extra
        loop to print spaces between I and N
    }
    for(int j=0;j<n;j++) {
        if (i==j || j==0 || j==n-1 ) {
            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 Launch6 {  
  
    public static void main(String[] args) {  
        int n = 5;  
        for(int i=1;i<n;i++) {  
            for(int j=1;j<n;j++) {  
                System.out.print(i);  
            }  
            System.out.println(" ");  
        }  
    }  
}
```

3. WAP to print



```
public class Launch7 {  
    public static void main(String[] args) {  
        int n=15;  
        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.

4. WAP to print



```

public class Launch9{

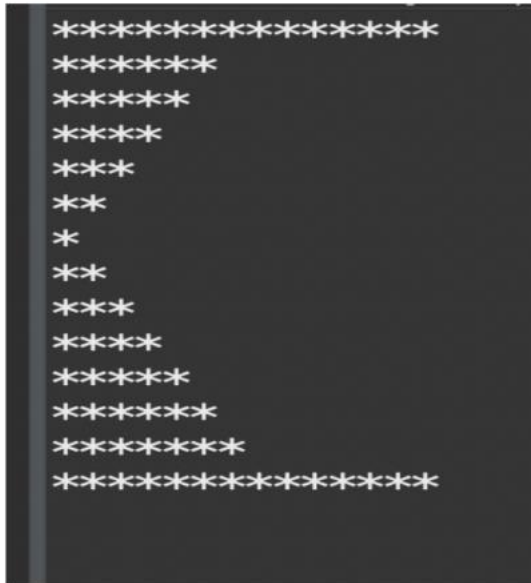
    public static void main(String[] args) {
        int n =10;
        for(int i =0 ; i<n ; i++) {
            for ( int j=0 ; j<n ;j++) {
                if(i-j >=(n-1)/2||i+j >=n-1+(n-1)/2 ) {
                    System.out.print("*");
                }else {
                    System.out.print(" ");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

```

}

5.

5. WAP to print



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

```
public class Launch8 {

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

    }

}
```