

Assignmen-1

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

Sol:

```
package patternprogramming;

public class printIneuron {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int n=10;

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

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

```

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

```

```

//PRINT U

```

```

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

```

```

//PRINTS R

```

```

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

```

```
}
```

```
//PRINTS 0
```

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

```
//PRINTS N
```

```
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( );  
}
```

```
}
```

```
}
```

1st Question Solution:

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

2. Write a program to print

1 1 1 1

2 2 2 2

3 3 3 3

4 4 4 4

Sol: **package** patternprogramming;

public class Question2nd {

```
    public static void main(String[] args) {
        // TODO Auto-generated method stub
```

```
        int n=5;
        for(int i=1;i<n;i++) {
            for(int j=1;j<n;j++) {
                System.out.print(i);
            }
            System.out.println();
        }
```

```
    }
```

```
}
```

2nd Question Solution

1111
2222
3333
4444

3. WAP to print

```
package patternprogramming;
```

```
public class Question3rd {
```

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

```
        // TODO Auto-generated method stub
```

```
        int n=14;
```

```
        for(int i=0;i<n;i++) {  
            for(int j=0;j<n;j++) {
```

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

```
                }
```

```
                else {
```

```
                    System.out.print(" ");
```

```
                }
```

```
            }
```

```
            System.out.println();
```

```
        }
```

```
    }
```

```
}
```

3rd Question Solution

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

4. WAP to print

```
package patternprogramming;
```

```
public class Question4th {
```

```
    public static void main(String[] args) {
        // TODO Auto-generated method stub
```

```
        int n=14;
```

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

```

        }

    }

}

```

4th Question Solution

```

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

```

Q5 Write a program to print

patternprogramming;

```

public class Question5th {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int n=14;
        for(int i=0;i<n;i++) {
            for(int j=0;j<n;j++) {
                if( i==0 && j>0 || i==n-1 && j>0
|| i+j<=(n+1)/2 && j>0 || i-j>=(n-1)/2 && j>0) {
                    System.out.print("*");
                }
                else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}

```

}

}

}

5th Solution

**

*

*

**
