

Assignment 1

Name-Ajay Kumar

Gmail-ajaykr4598@gmail.com

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

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

```

```

C:\Users\91626\OneDrive\Desktop> javaagent.C:\Program Files\JetBrains\IntelliJ IDEA\bin\java.exe -javaagent.C:\Program Files\JetBrains\IntelliJ IDEA\bin\java.exe
*   *       * ***** *       * ***** ***** *       *
*  **      * *       *       * *       * *       * **      *
* * *      * *       *       * *       * *       * * *      *
* * *      * *       *       * *       * *       * * *      *
* * *      * *       *       * *       * *       * * *      *
* * *      * ***** *       * ***** *       * * *      *
* * *      * * *      *       * * *      *       * * *      *
* * *      * * *      *       * * *      *       * * *      *
* * *      * * *      *       * * *      *       * * *      *
* * *      * * *      *       * * *      *       * * *      *
* * *      * * *      *       * * *      *       * * *      *
* * *      * * *      *       * * *      *       * * *      *
* * *      * * *      *       * * *      *       * * *      *
* * *      * * *      *       * * *      *       * * *      *

```

2. Write a program to print

1 1 1 1

2 2 2 2

3 3 3 3

4 4 4 4

```

Sol:- public class ShapeTwo {
    public static void main(String[] args) {
        int n = 4;
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                System.out.print(i+1);
            }
            System.out.println();
        }
    }
}

```

3. WAP to print

```

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

```

4.Sol:-

```

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

```

5.Sol:-

```

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

```