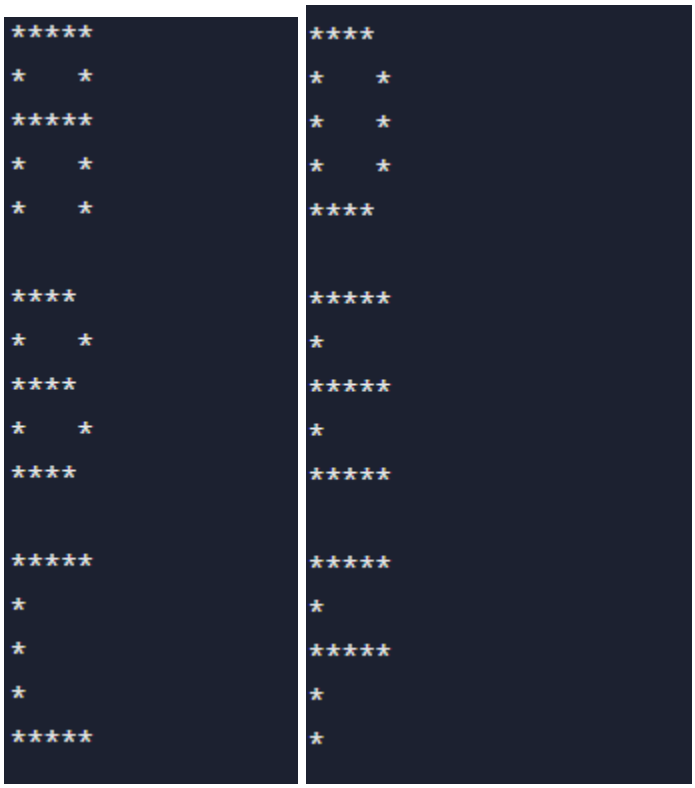
1. Write a Program(WAP) to print Alphabets A, B, C, D, E, F, G, H, using pattern programming logic

```
public class Main {
    public static void main(String[] args) {
        printA();
        printB();
        printC();
        printD();
        printE();
        printF();
        printG();
        printH();
    }

    public static void printA() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || col == 5 || (row == 3 && (col > 1 && col < 5)) || (row == 1 && (col
> 1 && col < 5))) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printB() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || (row == 1 && col < 5) || (row == 3 && col < 5) || (row == 5 && col
< 5) || col == 5 && row != 1 && row != 3 && row != 5) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }
```

```
    public static void printC() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || (row == 1 && col > 1) || (row == 5 && col > 1)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printD() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || (row == 1 && col < 5) || (row == 5 && col < 5) || (col == 5 && row
!= 1 && row != 5)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printE() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || row == 1 || row == 3 || row == 5) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }
```

```
    public static void printF() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || row == 1 || row == 3) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printG() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || (row == 1 && col > 1) || (row == 5 && col > 1) || (row == 3 && col
>= 3) || (col == 5 && row >= 3)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printH() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || col == 5 || row == 3) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }
}
```

// output

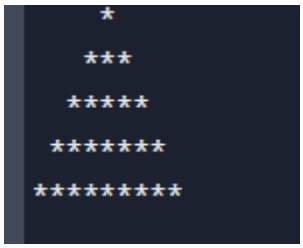


2. Write a program to print triangle using star pattern programming logic

```
public class Main {
    public static void main(String[] args) {
        int rows = 5; // Number of rows for the triangle

        for (int i = 1; i <= rows; i++) {
            // Print spaces to align the stars
            for (int j = rows; j > i; j--) {
                System.out.print(" ");
            }

            // Print stars
            for (int k = 1; k <= (2 * i - 1); k++) {
                System.out.print("*");
            }
```

```
            // Move to the next line
            System.out.println();
        }
    }
}
```

Output :

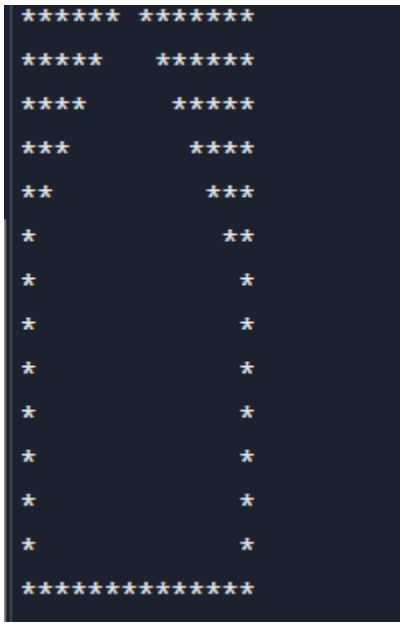


3. WAP to print

```
public class Main {
    public static void main(String[] args) {
        int n = 14;

        for(int i=1; i<=14; i++) {
            for(int j=1; j<=14; j++) {


                if(i<7) {
                    if( j>= n/2 - i + 1 && j < n/2 + i ) {
```

```
                System.out.print(" ");
            }
            else {
                System.out.print("*");
            }
        }
        else {
            if(j==1 || j==n || i==n)
                System.out.print("*");
            else {
                System.out.print(" ");
            }

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

Output :



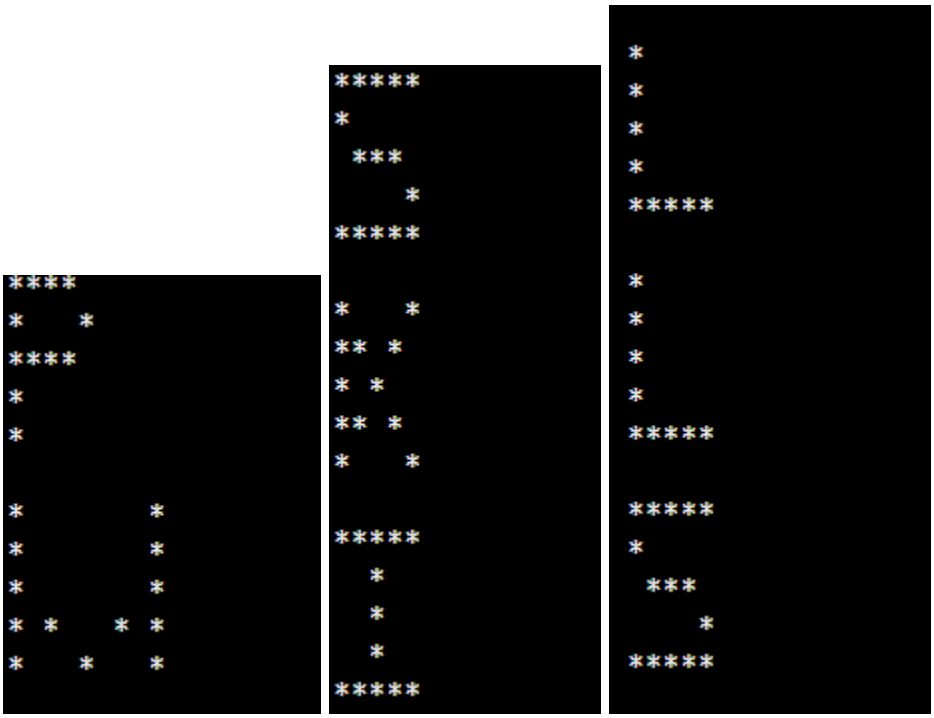
4. Write a program to print PW SKILLS using pattern programming logic.

```
public class Main {
    public static void main(String[] args) {
        printP();
        printW();
        printSpace();
        printS();
        printK();
        printI();
        printL();
        printL();
        printS();
    }

    public static void printP() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || (row == 1 && col < 5) || (row == 3 && col < 5) || (col == 5 && row
> 1 && row < 3)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printW() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 9; col++) {
                if (col == 1 || col == 9 || (row == 4 && (col == 3 || col == 7)) || (row == 5 && col
== 5)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }
```

```
    public static void printSpace() {
        System.out.println();
    }

    public static void printS() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if ((row == 1 && col > 1) || (row == 3 && col > 1 && col < 5) || (row == 5 && col
< 5) || (col == 1 && row < 3) || (col == 5 && row > 3)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printK() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || (row + col == 6) || (row - col == 0 && col > 1)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printI() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (row == 1 || row == 5 || col == 3) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
```

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

    public static void printL() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if (col == 1 || row == 5) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }
}
```

Output :



5. Write a program to print your name using pattern programming logic

```
public class Main {
    public static void main(String[] args) {
        printS();
        printU();
        printR();
        printA();
        printJ();
    }

    public static void printS() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if ((row == 1 && col > 1) || (row == 3 && col > 1 && col < 5) || (row == 5 && col
< 5) || (col == 1 && row < 3) || (col == 5 && row > 3)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printU() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
                if ((col == 1 && row < 5) || (col == 5 && row < 5) || (row == 5 && col > 1 && col
< 5)) {
                    System.out.print("*");
                } else {
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void printR() {
        for (int row = 1; row <= 5; row++) {
            for (int col = 1; col <= 5; col++) {
```

```
            if (col == 1 || (row == 1 && col < 5) || (row == 3 && col < 5) || (col == 5 && row
> 1 && row < 3) || (row == col && row > 3)) {
                System.out.print("*");
            } else {
                System.out.print(" ");
            }
        }
        System.out.println();
    }
    System.out.println();
  }

  public static void printA() {
    for (int row = 1; row <= 5; row++) {
        for (int col = 1; col <= 5; col++) {
            if (col == 1 || col == 5 || (row == 3 && (col > 1 && col < 5)) || (row == 1 && (col
> 1 && col < 5))) {
                System.out.print("*");
            } else {
                System.out.print(" ");
            }
        }
        System.out.println();
    }
    System.out.println();
  }

  public static void printJ() {
    for (int row = 1; row <= 5; row++) {
        for (int col = 1; col <= 5; col++) {
            if (row == 1 || (col == 3 && row < 5) || (row == 5 && col > 1 && col < 3) || (col
== 1 && row == 4)) {
                System.out.print("*");
            } else {
                System.out.print(" ");
            }
        }
        System.out.println();
    }
    System.out.println();
  }
}
```

Output :