Assignment Answers

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

Answer: Please give value , here I added Scanner class to take input from (n)

```
import java.util.Scanner;

class Question1_AlphabetABCDEFIGH{
    public static void main(String[] args) {
        System.out.println("Enter a input  number");
        Scanner scan = new Scanner(System.in);
        int n = scan.nextInt();

        // Alphabet A Open

            // Type -1

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

                        }
                        else
                        {
                            System.out.print(" ");
                        }
                   }
                    System.out.println();
                }

                //Type -2
```

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

        // Alphabet A close


        for(int i = 0 ; i < (n-1)/3 ; i++)
        {
        System.out.println();
        }

         // Alphabet B open


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

            // Alphabet B close

            for(int i = 0 ; i < (n-1)/3 ; i++)
            {
                System.out.println();
            }
```

```
            // Aphabet C open

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

            // Alphabet C close

            for(int i = 0 ; i < (n-1)/3 ; i++)
            {
                System.out.println();
            }

            // Alphabet D open


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

            for(int i = 0 ; i < (n-1)/2 ; i++)
            {
```

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

            // Alphabet E start

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

            for(int i =0 ; i<(n-1)/2 ; i++)
            {
                System.out.println();
            }

            // Alphabet F start

                                for(int i = 0 ; i < n ; i++)
                                {
                                    for(int j = 0 ; j < n ; j++)
                                        {
                                            if(j == 0 || i == 0 && j <= (n-1)/2 || i == (n-
1)/2 && j <= (n-1)/2)

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

            // Alphabet F stop

            for(int i = 0 ; i<n ;i++)
            {
                System.out.println();
```

```
            }

            // Alphabet I start

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

            for(int i = 0 ;i < (n-1)/3 ;i++)
            {
                System.out.println();
            }

            // Aphabet G stop

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

            // Alphabet G stop

            for(int i = 0 ;i < (n-1)/3 ; i++)
            {
                System.out.println();
```

```
            }

            // Alphabet H start

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



    }
}
```

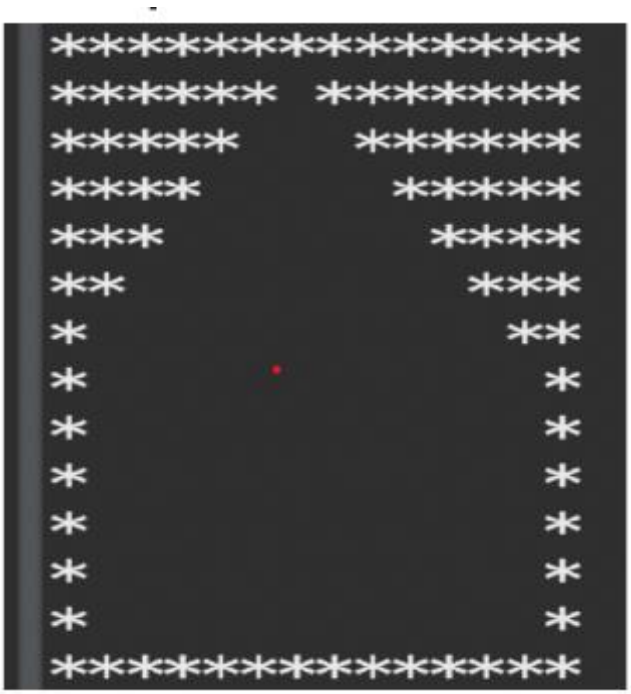
2. Write a program to print triangle using star pattern programming logic

Answer: Please give value , here I added Scanner class to take input from (n)

```
import java.util.Scanner;
public class Question2_Triangle {
    public static void main(String[] args) {
        System.out.println("Enter a number and I will show you  a TRIANGLE");

        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();

        // Print triangle using star

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

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


                System.out.print("");

            }


            // 2nd half triangle


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




    }

}
```

3. **WAP to print**



Answer: Please give value , here I added Scanner class to take input from (n)

```
import java.util.Scanner;

public class Question3 {
    public static void main(String[] args) {
        System.out.println("Enter a number , I will show a HOUSE.");


    Scanner scan = new Scanner(System.in);
    int n = scan.nextInt();


        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 || j == 0 || j == (n-1) || i == (n-1) )
                {
                    System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }
            System.out.println();
```

```
        }

}
}
```

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

Answer: Enter the number to see output (say 8) and enlarge the size of the terminal

```
import java.util.Scanner;
public class Question4_PWSKILLS {
    public static void main(String[] args) {
        System.out.println("Enter a number to show (PW SKILLS) , {Better to give number between
5 and 12 - if you want then increase the terminal size.} ");
        Scanner scan = new Scanner(System.in);
        int n = scan.nextInt();

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

                 // {part-2}  W (part- 0 to 1/4)

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

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

```
                // {part-3 }  W (part - 1/4 to 3/4)

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

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

                }

                //{part -4} W (part - '3/4 to 4/4' space -'pull')

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

                }

                System.out.print("               ");

                // {part -5} ( S (space -'half')

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

                System.out.print("  ");


                // part - 6 { K  }
```

```
            for(int j = 0 ; j < n  ; j++)
            {
                if( j == 0 || i+j == 3*(n-1)/5 || i-j == 2*(n-1)/5 )
                {
                System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }

            // part -7 { I }

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

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


            System.out.print("  ");
            // part-8 { L }

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

                    if( i == (n-1) || j == 0)
                    {
                        System.out.print("*");
                    }
                    else
                    {
                        System.out.print(" ");
                    }
            }
            System.out.print("  ");

            // part -9 { L }

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

                    if( i == (n-1) || j == 0)
```

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

                System.out.print("  ");

                // part -10 {S}

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









                System.out.println();
            }

    }

}
```

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

Answer: Enter a input number to see output (say 9) . Better to enlarge your terminal

```
import java.util.Scanner;

public class Question5 {
    public static void main(String[] args) {
```

```
        System.out.println("Enter a number to my Name(Enlarge your terminal screen for large
number {or enter 7 for better experience}) : ");
        Scanner scan = new Scanner(System.in);
        int n = scan.nextInt();

        // My name is : D.P.PAVAN KUMAR

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

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

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

                }

                // part - 3 ( P )
                for(int j = 0 ; j< n ; j++)

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


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

```
                }
                }

                // part - 4 ( . )

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

                // part -5 ( P )

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


                // part -6 ( A - 1st half)

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

                // part - 7 ( A 2nd half )

                for(int j = 0 ; j < n ; j++)
                {
                    if( i == j || i == (n-1)/2 && j < (n-1)/2 )
```

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


        // part -8 ( V 1st half )

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

        // part - 9 ( V 2nd half)

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

        // part 10 ( A 1st half)

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

```
                // part 11 ( A 2nd half)

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

                System.out.print("  ");
                // part -13 ( N )

                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("        ");

                // part -14 ( K )
                for(int j= 0 ; j < n ; j++)
                {
                    if( j == 0 || i + j == 3*(n-1)/5 || i - j == 2*(n-1)/5 )
                    {
                    System.out.print("*");
                    }
                    else
                    {
                        System.out.print(" ");
                    }
                }


                // part -15 (U)

                for(int j = 0 ; j< n ; j++)
                {
                    if ( j == 0 && i < (n-1) || i == (n-1) && j > 0 && j <(n-1) || j == (n-1)
&& i < (n-1) )
                    {
```

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

            System.out.print("  ");

            // part 16 ( M )

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

            System.out.print("  ");

            // part - 17 ( A 1st half)

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



            // part -18 ( A 2nd half)

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

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



            // part 19 ( R )

            for(int j = 0 ; j < n ;j++)
            {
                if( j == 0 || i == 0 && j < (n-1)/2 || j == (n-1)/2 && i > 0 && i < (n-1)/2
|| i == (n-1)/2 && j < (n-1)/2 || i - j == 2*(n-1)/5)
                {
                System.out.print("*");
                }
                else
                {
                    System.out.print(" ");
                }
            }









            System.out.println();
        }

    }

}
```

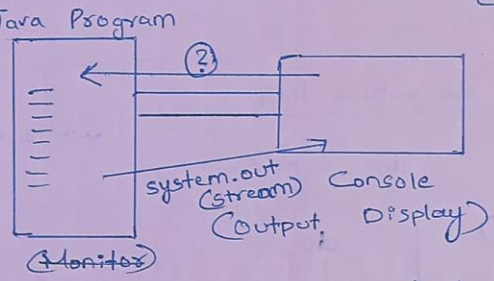
Notes of the day

29 Jan Loops and pattern programs.

① Lecture Intro and Scanner class in Java.

Topics
-> How to take input from user (scanner)
-> Pattern Programs.

- How to take user input (Scanner) (How to take input from console to java program.)



Scanner class
Inbuilt class in Java.

Inbuilt Class: So many class and activities are coded inbuiltly. in Java, (all requirements for those are already coded). As a developer we just need to call them/use them.

=> Scanner class :-
We need to built an object in order to give a life to class.

folder name in which scanner class is there.

```
import.java.util.Scanner ;   (*)
```
(Package) (Class)
go inside java library (ref variable name)

=> Create an object for scanner class. If you want to enable create an option to enter something.

we need to pass System.in (stream) this contructor of Scanner class

① `Scanner scan = new Scanner(System.in);`

* once only we have to write
* You will be getting a chance to enter str after creating object.
* There is a class (scanner) for which I am creating an object.

To Scan and get the integer through user input.
-> We have to use "nextInt()" method. in the Scanner class.

② `Int age = scan.nextInt();`

methods for diff data type that you need to scan and get.

① & ② getting str from console to your program.

Int -> nextInt() integer value from console to your program
float -> nextFloat() float value from console to "
double -> nextDouble() Real value from console to your program
String -> nextLine() / next()
- next() (for word)
- nextLine() (for Line) -> if your using many next including nextLine java unable to read. so better to use next() for string

② System.out.println()

(4) Pattern Programming (Loops, Conditional and operator)

* If you want to print stars at a specific location → use concept of Conditionals (if-else)

so far → (ఇప్పటి వరకు)

Q) i→0 1 2 3 4 (j) — n-1 — int n=5

```
0 * * * * *
1 *       *
2 *       *
3 *       *
4 * * * * *
```

consider rows → i values

5-1 → 4
n-1 → 4

```
for(int i=0 ; i<n ; i++)
{
    for(int j=0 ; j<n ; j++)
    { if(i==0||j==0||j==4||j==4
      sout("*"); }
      } else { sout(" "); }
    sout();
}
```

Note:

```
System.out.print("Lab1"); //1
// System.out.println("_Lab2"); //2
// System.out.print("Lab3"); //3
System.out.print(); //4
```

(2) After printing in where the cursor is

Output Analysis

(1) Lab1 ▭ ↙ cursor

(2) Lab1 _Lab2
▭

(3) Lab1 _Lab2
Lab3 ▭

(4) Lab1 _Lab2
Lab3
▭

Q) i==0 1 2 3 4 (n-1)

```
0 * * * * *
1 *       *
2 *       *
3 *       *
4 * * * * *
```

(n-3) (n-1)/2 n-1

Generalised formula

(i==0 || j==0 || j==n-1 || i==(n-1)/2) ("*") otherwise (" ")

Q)

```
    j==0 1 2 3 4 (n-1)
i==0 * * * * *
1        *
2        *
3        *
4        *
```

((n-1)/2)

(i==0 || j==(n-1)/2)

---

int n = 5;
↳ (input) number so that if you want to increase the size, you need not to enter at every place.

---

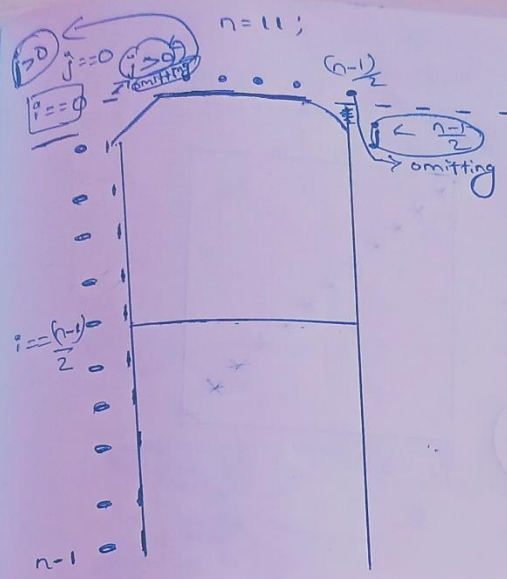
n=1

Q) n=5 n/2 n-1

```
i==0 * * * * *
1        *
2 * * * * *
3        *
4        *
```

(n/2) (n-1)

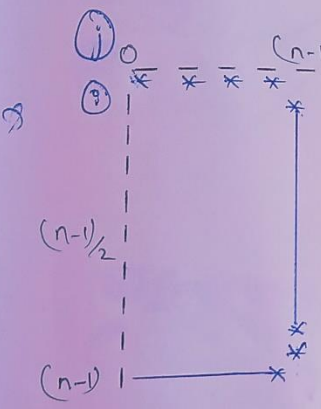
(H)



putting condition that must be true if to be executed

```
( i==0 && j>0 && j<(n-1)/2 ) ||
( j==0 && i>0 ) ||
( j==(n-1)/2 && j<=(n-1)/2 ) ||
( j==(n-1)/2 && i>0 )
```

Restriction




```
i==0 && j<(n-1)/2 || j==0 ||
i==n-1 && i<(n-1)/2 ||
j==(n-1)/2 && i>0 && i<n-1)
```

To print two 'D' adjacent

D D

code for printing one D; Except "sout();" at last.

```
system.out.print("  ");
code for printing oneD;
System.out.println();
```

```
for(int i=1 ; i<5 ; i++)
{
    system.out.print("*");
}
system.out.print(" ");
```

code for "□"

Output

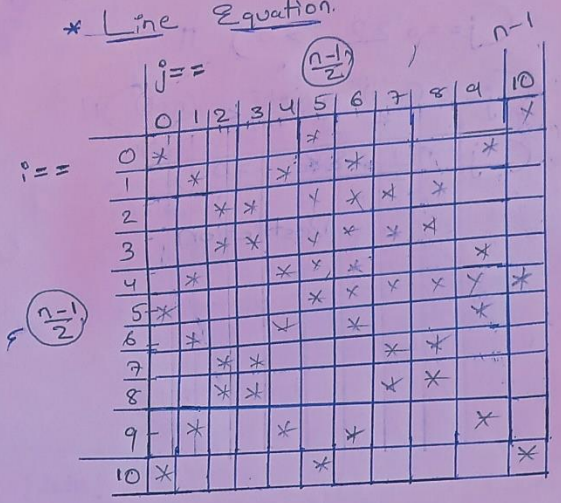
****

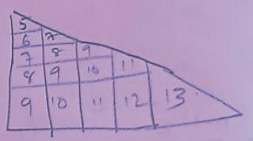
```
for(int i=1; i<5; i++)
{
    system.out.print("*");
}
sy sout();
```

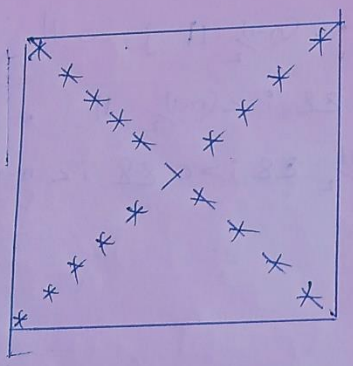
****

Complex Pattern Programming.

* Line Equation.





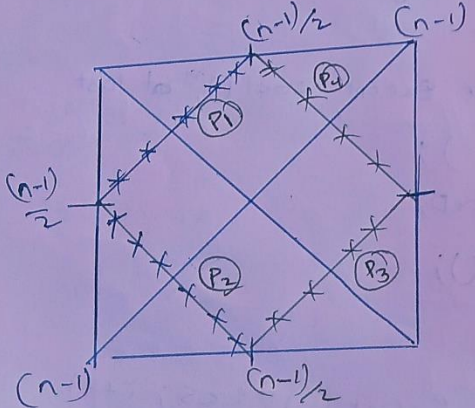


i == 0 1 2 ... 10
j == 10 9 8 ... 0

(i=j) ||

10 10 n=11;
10 = 11-1
= n-1

i+j = 10 <= n-1



P1

i == 0 1 2 ... 5
j == 5 4 5 3 ... 0

n=11;
5 = (n-1)/2

P4

i == 0 1 2 3 ... 5 6 7 8
j == 5 6 7 8 ...

5-0=5
6-1=5
7-2=5

i+j == (n-1)/2

j-1 == (n-1)/2

P2

i == 5 6 7 ...
j == 0 1 2 ...

5-0=5
6-1=5
7-2=5

i-j == (n-1)/2 = 5

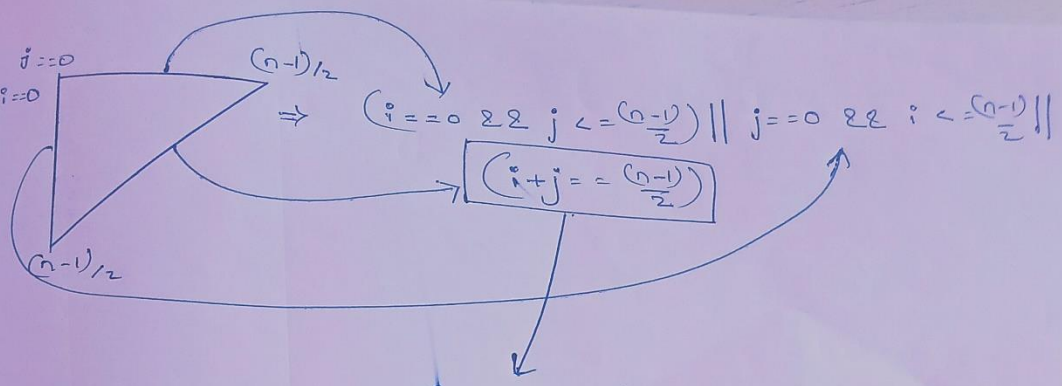
P3

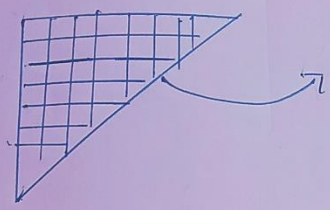
i == 10 9 8 ...
j == 5 6 7 ...

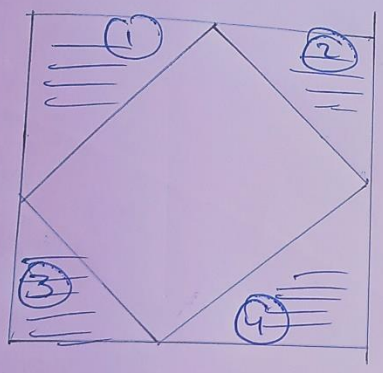
n=11
n-1=10

10+5=15 => 10+5
9+6=15
8+7=15

i+j == (n-1) + (n-1)/2







① $i==0 \;\&\&\; j<=(n-1)/2 \;||$
$j==0 \;\&\&\; i<=\frac{(n-1)}{2} \;||$
$i+j<=(n-1)/2$

② $i==0 \;\&\&\; j>=\frac{(n-1)}{2} \;||\; j==(n-1) \;\&\&\; i<=\frac{(n-1)}{2}$
$||\; j-i>=\frac{(n-1)}{2}$

③ $j==0 \;\&\&\; i>=\frac{(n-1)}{2} \;||\; i==(n-1) \;\&\&\; j<=\frac{(n-1)}{2}$
$||\; i-j=\frac{(n-1)}{2}$

④ $j==n-1 \;\&\&\; i>=\frac{(n-1)}{2} \;||$
$i==n-1 \;\&\&\; j>=\frac{(n-1)}{2} \;||$
$i+j=(n-1)+\frac{(n-1)}{2}$

2

$2(\frac{(n-1)}{2})$ ✗

$2*\frac{(n-1)}{2}$ ✓

Continue:- It is used to end the current iteration in a for loop (or while loop) after 'continue' keyword used and continue to the next iteration.

Break: It is used to break out a for loop, a while loop or a switch block.

Wherever you use break keyword loop which means that it may inside if block under loop. The loop break it when it comes up to it.

Exception !! we did sth wrong

Arithmetic Exception: Something problem in calculatio in our code