import java.util.Scanner;

public class Pattern1 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int inputLines = scn.nextInt();

printSquarePattern(inputLines);

}

private static void printSquarePattern(int inputLines) {

for(int i = 1; i <= inputLines; i ++) {

printSingleLine(inputLines);

}

}

private static void printSingleLine(int inputLines) {

for (int i = 1; i <=inputLines; i ++) {

System.out.print("\* ");

}

System.out.println();

}

}

2

import java.util.Scanner;

public class Pattern2 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int inputLines = scn.nextInt();

printPyramidPattern(inputLines);

}

private static void printPyramidPattern(int inputLines) {

for(int i = 1; i <= inputLines; i ++) {

printSingleLine(i);

}

}

private static void printSingleLine(int inputLines) {

for (int i = 1; i <=inputLines; i ++) {

System.out.print("\* ");

}

System.out.println();

}

}

3.

import java.util.Scanner;

public class Pattern3 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int inputLines = scn.nextInt();

printReversePyramidPattern(inputLines);

}

private static void printReversePyramidPattern(int inputLines) {

for(int i = inputLines; i >= 1; i --) {

printSingleLine(i);

}

}

private static void printSingleLine(int inputLines) {

for (int i = 1; i <=inputLines; i ++) {

System.out.print("\* ");

}

System.out.println();

}

}

4. import java.util.Scanner;

public class Pattern4 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int inputOfLines = scn.nextInt();

printRightAlignedTrianglePattern(inputOfLines);

}

private static void printRightAlignedTrianglePattern(int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

int stars = i;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int stars) {

for(int i = 1; i <= stars; i ++) {

System.out.print("\* ");

}

}

private static void printSpaces(int spaces) {

for(int i = 1; i <= spaces; i ++) {

System.out.print(" ");

}

}

}

5.

import java.util.Scanner;

public class Pattern5 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printReverseRightAlignedTrianglePattern(numberOfLines);

}

private static void printReverseRightAlignedTrianglePattern(int numberOfLines) {

for (int i = numberOfLines; i >= 1; i --) {

int stars = i;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int stars) {

for(int i = 1; i <= stars; i ++) {

System.out.print("\* ");

}

}

private static void printSpaces(int spaces) {

for(int i = 1; i <= spaces; i ++) {

System.out.print(" ");

}

}

}

6import java.util.Scanner;

public class Pattern6 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printReverseRightAlignedTrianglePattern(numberOfLines);

}

private static void printReverseRightAlignedTrianglePattern(int numberOfLines) {

for (int i = numberOfLines; i >= 1; i --) {

int stars = i;

int spaces = (numberOfLines - i) \* 2;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* ");

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" ");

}

}

}

7. import java.util.Scanner;

public class Pattern7 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printHollowSquarePattern(numberOfLines);

}

private static void printHollowSquarePattern(int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

for(int j = 1; j <= numberOfLines; j ++) {

if(i == 1 || i == numberOfLines || j == 1 || j == numberOfLines) {

System.out.print("\* ");

} else {

System.out.print(" ");

}

}

System.out.println();

}

}

}

8.

import java.util.Scanner;

public class Pattern8 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : Enter only Odds Number as number of Lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printXHollowRhombusPattern(numberOfLines);

}

private static void printXHollowRhombusPattern(int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

for(int j = 1; j <= numberOfLines; j ++) {

if(i == j || i + j == numberOfLines + 1) {

System.out.print("\* ");

} else {

System.out.print(" ");

}

}

System.out.println();

}

}

}

9. import java.util.Scanner;

public class Pattern9 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printTriangelPattern(numberOfLines);

}

private static void printTriangelPattern (int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

int stars = 2 \* (i - 1) + 1;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* ");

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" ");

}

}

}

9.

import java.util.Scanner;

public class Pattern9 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printTriangelPattern(numberOfLines);

}

private static void printTriangelPattern (int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

int stars = 2 \* (i - 1) + 1;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* ");

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" ");

}

}

}

10.

import java.util.Scanner;

public class Pattern10 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printReverseTriangelPattern(numberOfLines);

}

private static void printReverseTriangelPattern (int numberOfLines) {

for (int i = numberOfLines; i >= 1; i --) {

int stars = 2 \* (i - 1) + 1;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* ");

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" ");

}

}

}

11. import java.util.Scanner;

public class Pattern11 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printTriangelSpacePattern(numberOfLines);

}

private static void printTriangelSpacePattern (int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

int stars = i;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" "); // 4 spaces

}

}

}

12. import java.util.Scanner;

public class Pattern12 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printTriangleImperativeSymbolPattern(numberOfLines);

}

private static void printTriangleImperativeSymbolPattern (int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

int stars = 2 \* i;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i < numberOfStars; i ++) {

if(i % 2 == 1) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

} else {

System.out.print("! "); // total 8 // 1 star and 7 spaces

}

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" "); // 4 spaces

}

}

}

13.

import java.util.Scanner;

public class Pattern13 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printRightPyramidPattern(numberOfLines);

}

private static void printRightPyramidPattern (int numberOfLines) {

upperHalfPattern(numberOfLines);

lowerHalfReversePattern(numberOfLines);

}

private static void lowerHalfReversePattern(int numberOfLines) {

for (int i = numberOfLines - 1; i >= 1; i --) {

int stars = i;

printStars(stars);

System.out.println();

}

}

private static void upperHalfPattern(int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

int stars = i;

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

}

}

}

14. import java.util.Scanner;

public class Pattern14 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printLeftPyramidPattern(numberOfLines);

}

private static void printLeftPyramidPattern (int numberOfLines) {

upperHalfPattern(numberOfLines);

lowerHalfReversePattern(numberOfLines);

}

private static void lowerHalfReversePattern(int numberOfLines) {

for (int i = numberOfLines - 1; i >= 1; i --) {

int stars = i;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void upperHalfPattern(int numberOfLines) {

for (int i = 1; i <= numberOfLines; i ++) {

int stars = i;

int spaces = numberOfLines - i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" "); // 4 spaces

}

}

}

15.

import java.util.Scanner;

public class Pattern15 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printRightVTypePattern(numberOfLines);

}

private static void printRightVTypePattern (int numberOfLines) {

upperHalfPattern(numberOfLines);

lowerHalfReversePattern(numberOfLines);

}

private static void lowerHalfReversePattern(int numberOfLines) {

for (int i = numberOfLines - 1; i >= 1; i --) {

int stars = (numberOfLines - i) + 1;

int spaces = 2 \* (i - 1);

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void upperHalfPattern(int numberOfLines) {

for (int i = numberOfLines; i >= 1; i --) {

int stars = i;

int spaces = 2 \* (numberOfLines - i);

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" "); // 4 spaces

}

}

}

16

import java.util.Scanner;

public class Pattern16 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printLeftVTypePattern (numberOfLines);

}

private static void printLeftVTypePattern (int numberOfLines) {

upperHalfPattern(numberOfLines);

lowerHalfReversePattern(numberOfLines);

}

private static void lowerHalfReversePattern(int numberOfLines) {

for (int i = 1; i <= numberOfLines - 1; i ++) {

int stars = i + 1;

int spaces = i + 1; // Doubt here not sure

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void upperHalfPattern(int numberOfLines) {

for (int i = numberOfLines; i >= 1; i --) {

int stars = i;

int spaces = i;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" "); // 4 spaces

}

}

}

17

import java.util.Scanner;

public class Pattern17 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : Enter only odds number

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printSquareDiamondSpaceTypePattern (numberOfLines);

}

private static void printSquareDiamondSpaceTypePattern (int numberOfLines) {

upperHalfPattern(numberOfLines);

middleLineSpacePrint(numberOfLines);

lowerHalfReversePattern(numberOfLines);

}

private static void middleLineSpacePrint(int numberOfLines) {

for(int i = 1; i <= numberOfLines; i ++) {

System.out.print(" ");

}

System.out.println();

}

private static void lowerHalfReversePattern(int numberOfLines) {

int spaces = numberOfLines - 2;

for (int i = numberOfLines / 2; i >= 1; i --) {

int starsLeft = numberOfLines / 2 - (i - 1);

int starsRight = numberOfLines / 2 - (i - 1);

printStars(starsLeft);

printSpaces(spaces);

printStars(starsRight);

System.out.println();

spaces -= 2;

}

}

private static void upperHalfPattern(int numberOfLines) {

int spaces = 1;

for (int i = 1; i <= numberOfLines / 2; i ++) {

int starsLeft = numberOfLines / 2 - (i - 1);

int starsRight = numberOfLines / 2 - (i - 1);

printStars(starsLeft);

printSpaces(spaces);

printStars(starsRight);

System.out.println();

spaces += 2;

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" "); // 4 spaces

}

}

}

18

import java.util.Scanner;

public class Pattern18 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be odd or even

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printDiamondStarTypePattern (numberOfLines);

}

private static void printDiamondStarTypePattern (int numberOfLines) {

upperHalfPattern(numberOfLines);

lowerHalfReversePattern(numberOfLines);

}

private static void lowerHalfReversePattern(int numberOfLines) {

// int spaces = 1; // or we can manulally increase spaces

for (int i = numberOfLines / 2; i >= 1; i --) {

int stars = 2 \* (i - 1) + 1;

int spaces = numberOfLines / 2 - i + 1; // or we can by logic increase spaces

printSpaces(spaces);

printStars(stars);

System.out.println();

// spaces ++;

}

}

private static void upperHalfPattern(int numberOfLines) {

for (int i = 1; i <= numberOfLines / 2 + 1; i ++) {

int stars = 2 \* (i - 1) + 1;

int spaces = numberOfLines / 2 - i + 1;

printSpaces(spaces);

printStars(stars);

System.out.println();

}

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars; i ++) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces; i ++) {

System.out.print(" "); // 4 spaces

}

}

}

19.

import java.util.Scanner;

public class Pattern19 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : Enter only odds number

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printSquareDiamondBlankTypePattern (numberOfLines);

}

private static void printSquareDiamondBlankTypePattern (int numberOfLines) {

upperHalfPattern(numberOfLines);

// middleLineSpacePrint(numberOfLines);

// lowerHalfReversePattern(numberOfLines);

}

// private static void middleLineSpacePrint(int numberOfLines) {

// for(int i = 1; i <= numberOfLines; i ++) {

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

// }

// System.out.println();

// }

private static void lowerHalfReversePattern(int numberOfLines) {

int spaces = numberOfLines - 2;

for (int i = numberOfLines / 2; i >= 1; i --) {

int starsLeft = numberOfLines / 2 - (i - 2);

int starsRight = numberOfLines / 2 - (i - 1);

printStars(starsLeft);

printSpaces(spaces);

printStars(starsRight);

System.out.println();

spaces -= 2;

}

}

//logic to print the first half pattern

private static void upperHalfPattern(int numberOfLines) {

// Left Star print

for (int i = 1; i <= numberOfLines; i ++) {

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

System.out.print("\*");

}

// Loop Calculating the spaces

for(int j = 1; j <= 2 \* i - 2; j ++) {

System.out.print(" ");

}

// Right star print

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

System.out.print("\*");

}

System.out.println();

}

for(int i=numberOfLines - 1; i>=1; i--)

{

for(int j=i; j<=numberOfLines; j++)

{

System.out.print("\*");

}

//loop calculates space

for(int k=1; k<=(2\*i)-2; k++)

{

System.out.print(" ");

}

for(int j=i; j<= numberOfLines; j++)

{

System.out.print("\*");

}

System.out.println();

}

// for (int i = 1; i <= numberOfLines / 2 + 1; i ++) {

// int stars = numberOfLines - ;

// int spaces = i;

// // int starsRight = numberOfLines / 2 - (i - 1);

// printStars(stars);

// printSpaces(spaces);

// // printStars(starsRight);

// for(int j = 1; j <= numberOfLines / 2 - i + 2; j ++) {

// if(i == 1 && j == 1) {

// continue;

// }

// System.out.print("\* ");

// }

// System.out.println();

// // spaces += 2;

// }

}

private static void printStars(int numberOfStars) {

for(int i = 1; i <= numberOfStars / 2 - i + 2; i ++) {

System.out.print("\* "); // total 8 // 1 star and 7 spaces

}

}

private static void printSpaces(int numberOfSpaces) {

for(int i = 1; i <= numberOfSpaces \* 2 - 3; i ++) {

System.out.print(" "); // 4 spaces

}

}

}

20.

import java.util.Scanner;

public class Pattern20 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int n) {

upperHalfPattern (numberOfLines);

// lowerHalfPattern (numberOfLines);

}

private static void upperHalfPattern(int numberOfLines) {

for(int i = 1; i <= numberOfLines; i ++) {

}

}

}

21. import java.util.Scanner;

public class Pattern21 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// initialzise spaces and stars and totalch a/0 need

int totalCh = 2 \* numberOfLines - 1;

int spaces = totalCh - 2;

int stars = 1;

for(int i = 1; i <= numberOfLines; i ++) {

// for left \* print

for(int j = 1; j <= stars; j ++) {

System.out.print("\* ");

}

// for print space total between both stars left and right

for(int j = 1; j <= spaces; j ++) {

System.out.print(" ");

}

// for stopping one edge case in last for i == numberOflines bcz i want to print -1 from numberOfstars otherwise one extraa \* print

if(i == numberOfLines) {

stars --;

}

// right \* print

for(int j = 1; j <= stars; j ++) {

System.out.print("\* ");

}

// increasing and decreasing stars and spaces a/o pattern

spaces -= 2;

stars ++;

System.out.println();

}

}

}

22. import java.util.Scanner;

public class Pattern22 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// Initialize the stars and spaces and total Chracrater a/0 need pattern

int numberOfSpaces = -1;

int numberOfStars = numberOfLines;

for(int i = 1; i <= numberOfLines; i ++) {

// for left \* print

for(int j = 1; j <= numberOfStars; j ++) {

System.out.print("\* ");

}

// for print space total between both stars left and right

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print(" ");

}

// for right \* print

for(int j = 1; j <= numberOfStars; j ++) {

// handle one edge case for starting \* first line

if(j < numberOfLines) {

System.out.print("\* ");

}

}

// increasing and decreasing stars and spaces a/o pattern

numberOfSpaces += 2;

numberOfStars --;

System.out.println();

}

}

}

23. import java.util.Scanner;

public class Pattern23 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// creating logic for space and stars

int numberOfSpaces = numberOfLines - 1;

int numberOfStars = 1;

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for spacesa print bcz first space printing

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print(" ");

}

// traversal for printing the stars

for (int j = 1; j <= numberOfStars; j ++) {

// i want to print 1 everywhere a/o pattern

System.out.print("1 ");

}

// increasing the number of stars and number of spaces a/o pattern need

numberOfSpaces --;

numberOfStars += 2;

System.out.println();

}

}

}

24.

import java.util.Scanner;

public class Pattern24 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// creating logic for space and stars

int numberOfSpaces = numberOfLines - 1;

int numberOfStars = 1;

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for spacesa print bcz first space printing

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print(" ");

}

// traversal for printing the stars

for (int j = 1; j <= numberOfStars; j ++) {

// now we want same line print like 1 --> 1 and 2 --> 2 print like that

System.out.print(i + " ");

}

// increasing the number of stars and number of spaces a/o pattern need

numberOfSpaces --;

numberOfStars += 2;

System.out.println();

}

}

}

25.

import java.util.Scanner;

public class Pattern25 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// creating logic for space and stars

int numberOfSpaces = numberOfLines - 1;

int numberOfStars = 1;

int printValue = 1;

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for spacesa print bcz first space printing

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print("\t");

}

// traversal for printing the stars

for (int j = 1; j <= numberOfStars; j ++) {

// now we want same line print like 1 --> 1 and 2 --> 2 print like that

System.out.print(printValue + "\t");

printValue ++;

}

System.out.println();

// increasing the number of stars and number of spaces a/o pattern need

numberOfSpaces --;

numberOfStars += 2;

}

}

}

26.

import java.util.Scanner;

public class Pattern26 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// creating logic for space and stars

int numberOfSpaces = numberOfLines - 1;

int numberOfStars = 1;

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for spacesa print bcz first space printing

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print("\t");

}

// traversal for printing the stars

for (int j = 1; j <= numberOfStars; j ++) {

// now we want same line print like a/o j increasing this loop print like that

System.out.print(j + "\t");

}

System.out.println();

// increasing the number of stars and number of spaces a/o pattern need

numberOfSpaces --;

numberOfStars += 2;

}

}

}

27.

import java.util.Scanner;

public class Pattern27 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// creating logic for space and stars

int numberOfSpaces = numberOfLines - 1;

int numberOfStars = 1;

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for spacesa print bcz first space printing

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print("\t");

}

// for intializng the print a/o pattern

int printNum = 1;

// traversal for printing the stars

for (int j = 1; j <= numberOfStars; j ++) {

// now we want same line print like a/o j increasing this loop print like that

System.out.print(printNum + "\t");

// bcz after half its againg decreasing order so create that part

if(j <= numberOfStars / 2) {

printNum ++;

} else {

printNum --;

}

}

System.out.println();

// increasing the number of stars and number of spaces a/o pattern need

numberOfSpaces --;

numberOfStars += 2;

}

}

}

28. import java.util.Scanner;

public class Pattern28 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// creating logic for space and stars

int numberOfSpaces = numberOfLines - 1;

int numberOfStars = 1;

int printNum = 1;

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for spacesa print bcz first space printing

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print("\t");

}

// for intializng the print a/o pattern

// traversal for printing the stars

for (int j = 1; j <= numberOfStars; j ++) {

// now we want same line print like a/o j increasing this loop print like that

System.out.print(printNum + "\t");

// bcz after half its againg decreasing order so create that part

if(j <= numberOfStars / 2) {

printNum ++;

} else {

printNum --;

}

}

System.out.println();

// increasing the number of stars and number of spaces a/o pattern need

numberOfSpaces --;

numberOfStars += 2;

printNum += 2; // or we can solve by another variable can take on loop x = printNum then print X and printNum ++;

}

}

}

29. import java.util.Scanner;

public class Pattern29 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// creating logic for space and stars

int numberOfSpaces = numberOfLines - 1;

int numberPrint = 1;

int printNum = 1;

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for spacesa print bcz first space printing

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print("\t");

}

// traversal for printing the stars

for (int j = 1; j <= numberPrint; j ++) {

// when j == 1 || j == printnum then print number bcz always j == 1 || j == printum mean end will be nubmer

if(j == 1 || j == numberPrint) {

System.out.print(printNum + "\t");

} else {

System.out.print("0\t");

}

}

System.out.println();

// increasing the number of stars and number of spaces a/o pattern need

numberOfSpaces --;

numberPrint += 2;

printNum ++; // or we can solve by another variable can take on loop x = printNum then print X and printNum ++;

}

}

}

30. import java.util.Scanner;

public class Pattern30 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// for intializng the print a/o pattern

// traversal for printing the numbers

for (int j = numberOfLines; j >= 1; j --) {

// now we want same line print like a/o j increasing this loop print like that

System.out.print(j + "\t");

}

System.out.println();

}

}

}

31. import java.util.Scanner;

public class Pattern31 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for printing the numbers

for (int j = numberOfLines; j >= 1; j --) {

// now we want same line print like a/o Pattern increasing this loop print like that and print \* where i == j bcz loop is reverse otherswise i +j = n + 1

if(i == j) {

System.out.print("\*\t");

} else {

System.out.print(j + "\t");

}

}

System.out.println();

}

}

}

32. import java.util.Scanner;

import javax.print.attribute.standard.PrinterName;

public class Pattern32 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// initilize printnumber, totalch, stars

int stars = 1;

int totalch = (2 \* numberOfLines) - 1;

int printNum = 1;

// Method -- 1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// traversal for lines

for(int i = 1; i <= totalch; i ++) {

// traversal for printing the numbers and stars where even

for (int j = 1; j <= stars; j ++) {

// now we want same line print like a/o Pattern increasing this loop print like that and print \* where i == j bcz loop is reverse otherswise i +j = n + 1

if(j % 2 == 0) {

System.out.print("\*\t");

}else {

System.out.print(printNum + "\t");

}

}

System.out.println();

if (i < numberOfLines) {

printNum ++;

stars += 2;

} else {

printNum --;

stars -= 2;

}

}

// Method -- 2 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Basic and reverse after half complete

// Uppper Half pattern

// for(int i = 1; i <= numberOfLines; i ++) {

// for(int j = 1; j <= stars; j ++) {

// if(j % 2 == 0) {

// System.out.print("\*\t");

// }else {

// System.out.print(printNum + "\t");

// }

// }

// if(i < numberOfLines) {

// printNum ++;

// stars += 2;

// }

// System.out.println();

// }

// // just for helping the findout printnum and stars

// // System.out.println(printNum);

// // System.out.println(stars);

// printNum --;

// stars -= 2;

// // Lower Half Pattern

// for(int i = numberOfLines - 1; i >= 1; i --) {

// for(int j = 1; j <= stars; j ++) {

// if(j % 2 == 0) {

// System.out.print("\*\t");

// }else {

// System.out.print(printNum + "\t");

// }

// }

// if(i < numberOfLines) {

// printNum --;

// stars -= 2;

// }

// System.out.println();

// }

}

}

33import java.util.Scanner;

public class Pattern33 {

public static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

// Taking input number of lines

// Note : It can be solverd using methods

System.out.println("Enter the Number of Lines : ");

int numberOfLines = scn.nextInt();

printPattern (numberOfLines);

}

private static void printPattern(int numberOfLines) {

// creating logic for space and stars

int numberOfSpaces = numberOfLines - 1;

int numberOfStars = 1;

int printNum = numberOfLines;

int zeroPosition = 1; // bcz always same position and we will increment this by one

// traversal for lines

for(int i = 1; i <= numberOfLines; i ++) {

// traversal for spacesa print bcz first space printing

for(int j = 1; j <= numberOfSpaces; j ++) {

System.out.print(" ");

}

int printValue = printNum;

// System.out.println(printValue); // just confirming

// traversal for printing the stars

for (int j = 1; j <= numberOfStars; j ++) {

// for zero position

if(zeroPosition == j) {

System.out.print("0 ");

}else {

System.out.print(printValue + " ");

}

// bcz after half its again decreasing order so create that part

if(j <= numberOfStars / 2) {

printValue ++;

} else {

printValue --;

}

}

System.out.println();

// increasing the number of stars and number of spaces a/o pattern need

numberOfSpaces --;

numberOfStars += 2;

zeroPosition ++; // or we can solve by another variable can take on loop x = printNum then print X and printNum ++;

printNum --;

}

}

}