Java Lecture 6

Java - Introduction to Programming

Lecture 6

Patterns - Part 2

int n = 4;

//upper part

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

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

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

}

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

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

System.out.print(" ");

}

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

import java.util.\*;

public class Solutions {

public static void main(String args[]) {

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

}

System.out.println();

}

//lower part

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

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

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

}

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

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

System.out.print(" ");

}

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

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

}

System.out.println();

}

}

}

import java.util.\*;

public class Solutions {

public static void main(String args[]) {

int n = 5;

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

//spaces

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

System.out.print(" ");

}

//stars

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

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

}

System.out.println();

}

}

}

import java.util.\*;

public class Solutions {

public static void main(String args[]) {

int n = 5;

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

//spaces

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

System.out.print(" ");

}

//numbers

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

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

}

System.out.println();

}

}

}

import java.util.\*;

public class Solutions {

public static void main(String args[]) {

int n = 5;

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

//spaces

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

System.out.print(" ");

}

//first part

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

System.out.print(j);

}

//second part

for(int j=2; j<=i; j++) {

System.out.print(j);

}

System.out.println();

}

}

}

import java.util.\*;

public class Solutions {

public static void main(String args[]) {

int n = 5;

//upper part

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

//spaces

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

System.out.print(" ");

}

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

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

}

System.out.println();

}

//lower part

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

//spaces

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

System.out.print(" ");

}

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

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

}

System.out.println();

}

}

}

Homework Problems

Print a hollow Butterfly.

Print a hollow Rhombus.

\*\*\*\*\*

\* \*

\* \*

\* \*

\*\*\*\*\*

Print Pascal’s Triangle.

1

1 1

1 2 1

1 3 3 1

1 4 6 4 1

Print half Pyramid.

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

Print Inverted Half Pyramid.

11111

222

33

4