Number 2

public class multiplicationtable {

public static void main(String[] args) {

for (int i=1; i<=10;i++){

for (int j=1; j<=10;j++){

System.out.print(j\*i+ " ");

}

System.out.println();

}

}

}

Number 3

import java.util.Scanner;

public class diamonds {

public static void main(String[] args) {

Scanner in = new Scanner (System.in);

System.out.println("Enter a number");

int num = in.nextInt();

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

for (int k = 1; k<= num-i; k++) System.out.print (" ");

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

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

}

System.out.println();

}

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

for (int k= (num-j);k>=0 ;k--){

System.out.print(" ");

}

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

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

}

System.out.println();

}

}

}

Number 4

import java.util.Scanner;

import java.util.Random;

public class FlippingCoins {

public static void main (String[] args){

Scanner in=new Scanner(System.in);

Random rand = new Random ();

System.out.print ("How many times do you want to flip the coin? ");

int flips=in.nextInt();

int headCount=0;

int tailCount=0;

for(int i=0; i<=flips; i++)

{int x=rand.nextInt(1);

String coin="h";

if (x==0) {

coin="H";

headCount++;

}

if (x==1){

coin="T";

tailCount++;

}

System.out.print(coin);}

System.out.println();

System.out.println("The number of heads: "+headCount);

System.out.print("The number of tails: "+tailCount);

}

}

Number 5

import java.util.Random;

import java.util.Scanner;

public class histgram {

public static void main(String[] args) {

Scanner in=new Scanner(System.in);

Random rand=new Random();

System.out.print ("How many times do you want to roll the dice? ");

int total;

int numroll=in.nextInt();

int two=0;

int three=0;

int four=0;

int five=0;

int six=0;

int seven=0;

int eight=0;

int nine=0;

int ten=0;

int eleven=0;

int twelve=0;

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

total=rand.nextInt(12)+2;

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

if (total==2)two++;

if (total==3)three++;

if (total==4)four++;

if (total==5)five++;

if (total==6)six++;

if (total==7)seven++;

if (total==8)eight++;

if (total==9)nine++;

if (total==10)ten++;

if (total==11)eleven++;

if (total==12)twelve++;

}

System.out.println();

System.out.print("2:");

for (int j=1;j<=two;j++)System.out.print("\*");

System.out.println();

System.out.print("3:");

for (int j=1;j<=three;j++)System.out.print("\*");

System.out.println();

System.out.print("4:");

for (int j=1;j<=four;j++)System.out.print("\*");

System.out.println();

System.out.print("5:");

for (int j=1;j<=five;j++)System.out.print("\*");

System.out.println();

System.out.print("6:");

for (int j=1;j<=six;j++)System.out.print("\*");

System.out.println();

System.out.print("7:");

for (int j=1;j<=seven;j++)System.out.print("\*");

System.out.println();

System.out.print("8:");

for (int j=1;j<=eight;j++)System.out.print("\*");

System.out.println();

System.out.print("9:");

for (int j=1;j<=nine;j++)System.out.print("\*");

System.out.println();

System.out.print("10:");

for (int j=1;j<=ten;j++)System.out.print("\*");

System.out.println();

System.out.print("11:");

for (int j=1;j<=eleven;j++)System.out.print("\*");

System.out.println();

System.out.print("12:");

for (int j=1;j<=twelve;j++)System.out.print("\*");

}

}