1)

import java.util.\*;

import java.util.Random;

public class prgm1{

public static void main(String[] arr){

Scanner sc=new Scanner(System.in);

System.out.print("Enter the number of test cases:");

int t=sc.nextInt();

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

try{

long n=sc.nextLong();

System.out.println(n+" can be fitted in:");

if(n>=-128&&n<=127)System.out.println("\*byte");

if(n>=-32768&&n<=32767)System.out.println("\*short");

if(n>=-2147483648L&&n<=2147483647L)System.out.println("\*int");

if(n>=-9223372036854775808L&&n<=9223372036854775807L)System.out.println("\*long");

}catch(Exception e){

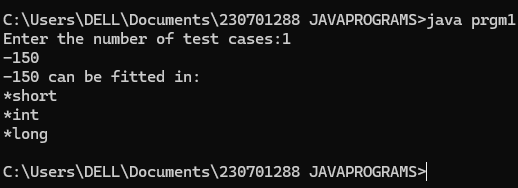
System.out.println(sc.next()+" can't be fitted anywhere.");

}

}

}

}



2)

import java.util.\*;

import java.util.Random;

public class prgm1{

public static void main(String[] arr){

Scanner sc=new Scanner(System.in);

int cents=sc.nextInt();

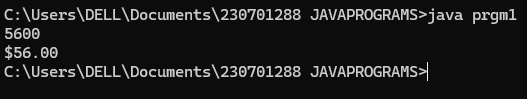
double cent=cents;

double dollars=cent/100;

System.out.format("$%.2f",dollars);

}

}



3)

import java.util.\*;

import java.util.Random;

public class prgm1{

public static void main(String[] arr){

Scanner sc=new Scanner(System.in);

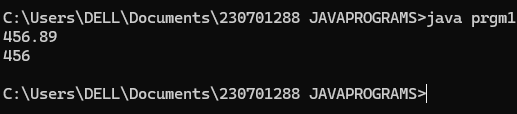
double score=sc.nextDouble();

int score1=(int)score;

System.out.println(score1);

}

}



4)

import java.util.\*;

public class prgm1

{

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int salary = sc.nextInt();

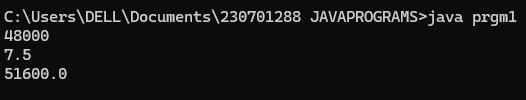
double interest = sc.nextDouble();

double newSalary = salary+(salary \* (interest\*0.01));

System.out.println(newSalary);

}

}



5)

import java.util.\*;

public class prgm1

{

public static void main(String args[])

{

Scanner sc = new Scanner(System.in);

int num = sc.nextInt();

int rem = 0, rev = 0;

while(num!=0)

{

rem = num%10;

rev = rev\*10 + rem;

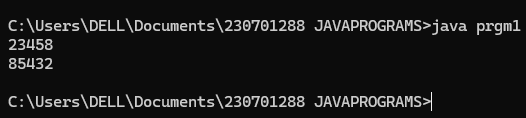
num /= 10;

}

System.out.println(rev);

}

}



6)

import java.util.Scanner;

public class prgm1

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

int n = sc.nextInt();

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

{

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

System.out.print(" ");

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

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

System.out.println();

}

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

for (int j = n; j > i; j--)

System.out.print(" ");

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

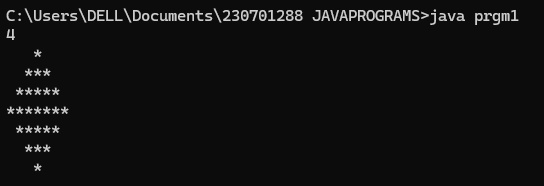
System.out.print("\*");

System.out.println();

}

}

}



7)

import java.util.Scanner;

public class prgm1 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int n = sc.nextInt();

sc.close();

int[][] p = new int[n][];

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

p[i] = new int[i + 1];

p[i][0] = 1;

p[i][i] = 1;

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

p[i][j] = p[i - 1][j - 1] + p[i - 1][j];

}

}

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

int spaces = (n - i - 1);

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

System.out.print(" ");

}

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

System.out.print(p[i][j] + " ");

}

System.out.println();

}

for (int i = n - 2; i >= 0; i--) {

int spaces = (n - i - 1);

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

System.out.print(" ");

}

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

System.out.print(p[i][j] + " ");

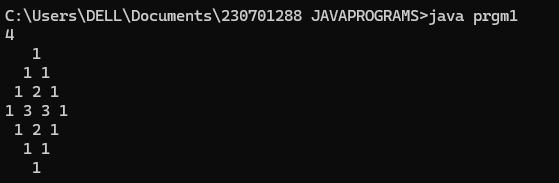
}

System.out.println();

}

}

}



8)

import java.util.\*;

public class prgm1

{

public static void main(String args[])

{

Scanner sc = new Scanner(System.in);

int q = sc.nextInt();

while(q>0)

{

int a = sc.nextInt();

int b = sc.nextInt();

int n = sc.nextInt();

int d = 0;

while(d<=n)

{

int sum = a;

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

sum += Math.pow(2, i)\*b;

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

d++;

}

q--;

}

}

}

