**PROGRAM 1**

Write a program that prints the quadrant number of a point (x,y) on a plane. Recall that points in quadrant 1 have positive x and y values, points in quadrant 2 have a negative x value and a positive y value, points in quadrant 3 have negative x and y values, and the remaining points are in the quadrant 4. If a point is on an axis, choose the quadrant with the lower quadrant number.   
**SOURCE CODE**  
  
public class q1

{

public static void main(String[] args)

{

int x=-1, y=2;

if(x==0 && y==0)

System.out.println("("+ x+","+y+")"+" - Origin");

else if(x>=0 && y<0)

System.out.println("("+ x+","+y+")"+" - Second Quadrant");

else if(x<=0 && y<0)

System.out.println("("+ x+","+y+")"+" - Third Quadrant");

else if(x<0 && y>=0)

System.out.println("("+ x+","+y+")"+" - Fourth Quadrant");

else

System.out.println("("+ x+","+y+")"+" - First Quadrant");

}

}

**OUTPUT**



**PROGRAM 2**

Write a program that reads a character from the user and then uses a switch statement to achieve what the following if statement does.

if ((choice == ‘A’) || (choice == ‘a’))

    printf(“Action movie fan\n”);

else if ((choice == ‘C’) || (choice == ‘c’))

    printf(“Comedy movie fan\n”);

else if ((choice == ‘D’) || (choice == ‘d’))

    printf(“Drama movie fan\n”);

else

printf(“Invalid choice\n”);

**SOURCE CODE**

import java.util.\*;

public class q2

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

System.out.println("Enter character");

char ch = sc.next().charAt(0);

switch(ch){

case 'a' :

case 'A':

System.out.println(ch +"-Action movie fan");

break;

case 'c' :

case 'C':

System.out.println(ch +"Comedy movie fan");

break;

case 'd' :

case 'D':

System.out.println(ch +"Drama movie fan");

break;

default:

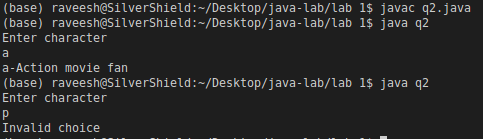
System.out.println("Invalid choice");

}

}

}

**OUTPUT**



**PROGRAM 3**

The salary scheme for a company is given as follows:

Salary range for grade A: $700 - $899

Salary range for grade B: $600 - $799

Salary range for grade C: $500 - $649

A person whose salary is between $600 and $649 is in grade C if his merit points are below 10, otherwise he is in grade B. A person whose salary is between $700 and $799 is in grade B if his merit points are below 20, otherwise, he is in grade A. Write a program to read in a person’s salary and his merit points, and displays his grade.

**SOURCE CODE**

import java.util.\*;

public class q3

{

public static void main(String[] args)

{

int salary,merit;

Scanner sc = new Scanner(System.in);

System.out.println("Enter Salary");

salary=sc.nextInt();

System.out.println("Enter Merit");

merit=sc.nextInt();

if((salary>=500 && salary<=649)||(salary>=600 && salary<=649 && merit<10))

System.out.println("salary: $"+salary+ ", merit:"+merit +" - Grade C");

else if((salary>=650 && salary<=799) || (salary>=700 && salary<=799 && merit <20))

System.out.println("salary: $"+salary+ ", merit:"+merit +" - Grade B");

else if(salary>=800 && salary<=899)

System.out.println("salary: $"+salary+ ", merit:"+merit +" - Grade A")

}

}

**OUTPUT**

