COMSATS UNIVERSITY, ISLAMABAD

Programming Fundamentals

--CSC103--

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1.Input a character from user. Check if it is vowel or consonant.
First do it with if-else statement and then with switch statement.

Using If-else:

```java
package task1;
import java.util.*;

public class Task1 {


    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        char character = scan.next().charAt(0);
        if (character == 'a' || character == 'e'|| character == 'i' ||
character == 'o' || character == 'u' ||
                character == 'A' || character == 'E' || character == 'I'||
character == 'O' || character == 'U'){
            System.out.println("You entered a Vovel ");
        }
        else
            System.out.println("You entered a consonent");

    }

}
```

Switch Statement:

```java
package task1;
import java.util.*;

public class Task1 {


    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        char character = scan.next().charAt(0);
        switch(character){
            case 'a' : case 'e' : case 'i' : case 'o' : case 'u' : case 'A' :
case 'E' : case 'I' : case 'O' :case 'U' :
                System.out.println("You entered vovel");
                break;
            default:
                System.out.println("You entered Consonent");

        }
    }

}
```

2.Take three floating-point numbers. Find the largest of them. Implement using nested-if statement, and then with multi-way if-else statement.

Nested If:

```java
package task1;
import java.util.*;

public class Task1 {

    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter three floating point numbers: ");
        float num1 = scan.nextFloat();
        float num2 = scan.nextFloat();
        float num3 = scan.nextFloat();
        if (num1 > num2)
            if (num1 > num3)
                System.out.println("Num 1 is greatest");
        if (num2 > num1)
            if (num2 > num3)
                System.out.println("Num 2 is greatest");
        if (num3 > num2)
            if (num3 > num1)
                System.out.println("Num 3 is greatest");
        if (num1 == num2)
            if (num1 == num3)
                System.out.println("Numbers are equal");


    }
}
```

Multiway if else:

```java
package task1;
import java.util.*;

public class Task1 {

    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter three floating point numbers: ");
        float num1 = scan.nextFloat();
        float num2 = scan.nextFloat();
        float num3 = scan.nextFloat();
```

```java
        if (num1 > num2 &&  num1 > num3 ){
            System.out.println("Num 1 is greater");
        }
        else if ((num2 > num1) &&  (num2 > num3) ){

            System.out.println("Num 2 is greater");
        }
        else if (num3 > num1 && num2 > num3)
            System.out.println("Num 3 is greater");
        else
            System.out.println("Numbers are equal");




    }
}

}
```

3.Input a year from keyboard. Your program should determine if it is a leap year or not.

```java
package task1;
import java.util.*;

public class Task1 {

    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter a Year: ");
        int year = scan.nextInt();
        if (year % 4 == 0)
            System.out.println("Leap year");
        else
            System.out.println("Not a Leap year");


    }

}
```

4.Input a character. Determine if the character is an alphabet or not. If it is an alphabet, check if it is an uppercase alphabet or lowercasealphabet.

```java
package task1;
import java.util.*;

public class Task1 {


    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter a character");
        char character = scan.next().charAt(0);
        int ascii = (int) character;

        if (ascii >= 65 && ascii <= 90 || ascii >= 97 && ascii <= 122 ){
            System.out.println("Its an alphabet");
            if (ascii >= 65 && ascii <= 90 )
                System.out.println("Its an Upper case alphabet");

            else
                System.out.println("Its a Lower case alphabet");
        }
        else
            System.out.println("Not an alphabet");


    }

}
```

5.Calculate a student's grade and GPA for Programming Fundamentals. Get marks from user.

```java
package task1;
import java.util.*;

public class Task1 {


    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter your numbers: ");
        int number = scan.nextInt();
        if (number < 50)
            System.out.println("Your grade is F and Your Gpa is 0.0");
        else if (number >= 50 && number <=59 )
            System.out.println("Your grade is D and Your Gpa is 1.0");
        else if (number >= 60 && number <=69)
            System.out.println("Your grade is C and Your Gpa is 2.0");
        else if (number >= 70 && number <=79 )
            System.out.println("Your grade is B and Your Gpa is 3.0");
        else if (number >= 80 && number <= 89)
```

```java
            System.out.println("Your grade is A and Your Gpa is 3.5");
        if (number >= 90 && number <= 100)
            System.out.println("Your grade is A+ and Your Gpa is 4.0");
        else
            System.out.println("Invailid Input");



    }

}
```

6.Make a scientific calculator. Implement 10 math functions, using Java's Math class, with switch-case statement.

```java
package task1;
import java.util.*;

public class Task1 {

    public static void main(String[] args) {

        Scanner scan = new Scanner(System.in);
        System.out.println("Enter your numbers: ");
        int number = scan.nextInt();
        System.out.println("Enter 1 to sin()"
                + "\nEnter 2 to cos()"
                + "\nEnter 3 to tan()"
                + "\nEnter 4 to sqr()"
                + "\nEnter 5 to sqrt()"
                + "\nEnter 6 to ln()"
                + "\nEnter 7 to log()"
                + "\nEnter 8 to cube()"
                + "\nEnter 9 to abs()"
                + "\nEnter 10 to find x^-1");
        int choice = scan.nextInt();
        switch (choice){
            case 1:
                System.out.println("Sin of the number is :"
+Math.sin(number));
                break;
            case 2:
                System.out.println("cos of the number is :"
+Math.cos(number));
                break;
            case 3:
                System.out.println("tan of the number is :"
+Math.tan(number));
                break;
            case 4:
                System.out.println("sqr of the number is :"
```

```
+Math.pow(number,number));
                break;
            case 5:
                System.out.println("sqrt of the number is :"
+Math.sqrt(number));
                break;
            case 6:
                System.out.println("ln of the number is :"
+Math.log10(number));
                break;
            case 7:
                System.out.println("log of the number is :"
+Math.log(number));
                break;
            case 8:
                System.out.println("cube of the number is :"
+Math.pow(number,3));
                break;
            case 9:
                System.out.println("abs of the number is :"
+Math.abs(number));
                break;
            case 10:
                System.out.println("x^-1 of the number is :"
+Math.pow(number,-1));
                break;
        }
    }

}
```

7.Find difference between two time periods (a time period is hours:minutes:seconds).

```
package task1;
import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.util.*;

public class Task1 {

    public static void main(String[] args) throws ParseException {

        Scanner scan = new Scanner(System.in);
        SimpleDateFormat format = new SimpleDateFormat("HH:mm:ss");
        String time1 = "17:13:00";
        String time2 = "20:23:10";
        Date date1 = format.parse(time1);
        Date date2 = format.parse(time2);
        long diff = date2.getTime() - date1.getTime();
        System.out.println(diff);

    }
```

```
}
```

8.Make rock/paper/scissors game.

```java
package task1;

import java.util.*;

public class Task1 {

    public static void main(String[] args) {

        Scanner scan = new Scanner(System.in);
        Random rand = new Random();
        int randNum = rand.nextInt(3);
        System.out.println("Enter your choice"
                + "\n 0 for Rock"
                + "\n 1 for paper"
                + "\n 2 for secisor");
        int choice = scan.nextInt();
        if (choice == 0){
            if (randNum == 1)
                System.out.println("Computer chosse Paper. Computer won");
            else if (randNum == 2)
                System.out.println("Computer chosse secisor. You won");
            else
                System.out.println("Draw");
        }
        else if (choice == 1){
            if (randNum == 0)
                System.out.println("Computer chosse Rock. You won");
            else if (randNum == 2)
                System.out.println("Computer chosse secisor. Computer won");
            else
                System.out.println("Draw");
        }
        else if (choice == 2){
            if (randNum == 0)
                System.out.println("Computer chosse Rock. Computer won");
            else if (randNum == 1)
                System.out.println("Computer chosse Paper .You won");
            else
                System.out.println("Draw");
        }
        else
            System.out.println("You entered wrong choice");
    }
}
```

9.Make a small quiz game. The design of the quiz can be similar to what is given hereunder. You can however make it more interesting. Use only decision structures (no loops, arrays, etc.)

a.Give three options of domainsto choose from; for example, science, geography, history. User will select one of the domains.

b.Ask the user five different MCQs from the chosen domain. For example, if the user has chosen 'history', your program will now ask 5 MCQs related to history.

c.For every right answer, 5 points shall be awarded to the user. For every wrong answer, 2 points shall be deducted.

d.Display total points earned by the user.

```java
package com.company;

import java.util.Scanner;

public class quizGame {
    public static void main(String args[]){
        int choice, total_num = 0;
        Scanner scan = new Scanner(System.in);
        int subjectName;
        System.out.println("Enter you domain. " +
                "\n 1. Science " +
                "\n 2. Geography " +
                "\n 3. History: ");
        subjectName = scan.nextInt();
        if (subjectName == 1 ) {
            System.out.println(":You Selected Science:");
            System.out.println("Question Number 1" +
                    "\nOil, natural gas and coal are examples of" +
                    "\n 1. Fossil Fuels" +
                    "\n 2. Bio Fuels" +
                    "\n 3. Renewable Resources" +
                    "\n 4. Geothermal resources");
            choice = scan.nextInt();
            if (choice == 1)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
```

```java
            System.out.println("Question Number 2" +
                    "\nWhat is the main cause of seasons on the Earth?" +
                    "\n 1. The distance between the Earth and the sun" +
                    "\n 2. Changes in the amount of energy coming from the
sun" +
                    "\n 3. The tilt of the Earth's axis in relation to the
sun" +
                    "\n 4. The speed that the Earth rotates around the sun");
            choice = scan.nextInt();
            if (choice == 3)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 3" +
                    "\nWhen large areas of forest are removed so land can be
converted for other uses, such as farming, which of the following occurs?" +
                    "\n 1. Decreased carbon dioxide" +
                    "\n 2. Increased erosion" +
                    "\n 3. Greater oxygen production" +
                    "\n 4. Colder temperature");
            choice = scan.nextInt();
            if (choice == 2)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 4" +
                    "\nA car travels at a constant speed of 40 miles per
hour. How far does the car travel in 45 minutes?" +
                    "\n 1. 25 miles" +
                    "\n 2. 30 miles" +
                    "\n 3. 35 miles" +
                    "\n 4. 40 miles");
            choice = scan.nextInt();
            if (choice == 2)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 5" +
                    "\nA magnifying glass is what type of lens?" +
                    "\n 1. Convex lens" +
                    "\n 2. Concave lens" +
                    "\n 3. Microscopic lens" +
                    "\n 4. Simple glass");
            if (choice == 2)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("You got " + total_num + " out of 25");

        }
        else if (subjectName == 2) {
            System.out.println(":You Selected Geography:");
            System.out.println("Question Number 1" +
                    "\nWhat is the capital of Pakistan?" +
                    "\n 1. Karachi" +
                    "\n 2. Islamabad" +
```

```java
                    "\n 3. Lahore" +
                    "\n 4. Peshawer");
            choice = scan.nextInt();
            if (choice == 2)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 2" +
                    "\n Where is Pakistan located?" +
                    "\n 1. Northeast Asia" +
                    "\n 2. Southern Asia" +
                    "\n 3. Central Asia" +
                    "\n 4. Southeast Asia");
            choice = scan.nextInt();
            if (choice == 2)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 3" +
                    "\nWhat percentage of the population of Pakistan lives in
towns or cities?" +
                    "\n 1. 88%" +
                    "\n 2. 52%" +
                    "\n 3. 36%" +
                    "\n 4. 21%");
            choice = scan.nextInt();
            if (choice == 3)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 4" +
                    "\nHow big is Pakistan?" +
                    "\n 1. Twice the size of Texas" +
                    "\n 2. A little bigger than Delaware" +
                    "\n 3. Slightly smaller than Nevada" +
                    "\n 4. Somewhat less than twice the size of California");
            choice = scan.nextInt();
            if (choice == 4)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 5" +
                    "\nWhat are the countries that border Pakistan?" +
                    "\n 1. Afghanistan, China, Turkmenistan, and India" +
                    "\n 2. China, India, Iran, and Afghanistan" +
                    "\n 3. India, Turkmenistan, Iran, and Afghanistan" +
                    "\n 4. Iran, Afghanistan, Turkmenistan, and China");
            choice = scan.nextInt();
            if (choice == 2)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("You got " + total_num + " out of 25");
        }
        else if (subjectName == 3 ) {
                System.out.println(":You Selected History:");
                System.out.println("Question Number 1" +
```

```java
                    "\nWorld War I began in which year?" +
                    "\n 1. 1923" +
                    "\n 2. 1938" +
                    "\n 3. 1917" +
                    "\n 4. 1914");
            choice = scan.nextInt();
            if (choice == 4)
                total_num = total_num + 5;
            else
                total_num = total_num - 2;

            System.out.println("Question Number 2" +
                    "\nAdolf Hitler was born in which country?" +
                    "\n 1. Germany" +
                    "\n 2. France" +
                    "\n 3. Austria" +
                    "\n 4. Poland");
            choice = scan.nextInt();
            if (choice == '3')
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 3" +
                    "\nWho was the first Western explorer to reach
China?" +
                    "\n 1. Magellan" +
                    "\n 2. Cook" +
                    "\n 3. Marco Polo" +
                    "\n 4. Sir Francis Drake");
            choice = scan.nextInt();
            if (choice == '3')
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 4" +
                    "\nWhat is the date of independence of Pakistan" +
                    "\n 1. 14th aug 1945" +
                    "\n 2. 14th aug 1941" +
                    "\n 3. 14th aug 1947" +
                    "\n 4. 14th aug 1946");
            choice = scan.nextInt();
            if (choice == '3')
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
            System.out.println("Question Number 5" +
                    "\nHow many republics made up the former Soviet
Union?" +
                    "\n 1. 10" +
                    "\n 2. 20" +
                    "\n 3. 12" +
                    "\n 4. 15");
            choice = scan.nextInt();
            if (choice == '4')
                total_num = total_num + 5;
            else
                total_num = total_num - 2;
```

```java
                System.out.println("You got " + total_num + " out of 25");



        }

    }
}
```

10.Make Tic Tac Toe game, using only selection statements. Do not use loops.

```java
package com.company;

import java.util.Scanner;

public class ticktack {
    public static void main(String args[]){
        Scanner scan = new Scanner(System.in);
        int player1, player2;
        char place_1 = '1', place_2 = '2'  , place_3 = '3', place_4 = '4',
place_5 = '5', place_6 = '6', place_7 = '7', place_8 = '8', place_9 = '9';
        System.out.println("O for first player and X for Second player:" +
                "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                "\n--|---|--" +
                "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                "\n--|---|--" +
                "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
        System.out.println("Player_1 please select place: ");
        player1 = scan.nextInt();
        if (player1 == 1) {
            place_1 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 2) {
            place_2 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
```

```java
        else if (player1 == 3) {
            place_3 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 4) {
            place_4 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 5) {
            place_5 ='O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 6) {
            place_6 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );


        }
        else if (player1 == 7) {
            place_7 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
```

```java
        }
        else if (player1 == 8) {
            place_8 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 9) {
            place_9 ='O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else
            System.out.println("You picked wrong location");

        System.out.println("Player_2 please select place: ");
        player2 = scan.nextInt();
        if (player2 == 1) {
            place_1 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 2) {
            place_2 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 3) {
            place_3 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
```

```java
                        "\n"+     place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+     place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 4) {
            place_4 = 'X';

            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+     place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+     place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 5) {
            place_5 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+     place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+     place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 6) {
            place_6 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+     place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+     place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 7) {
            place_7 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+     place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+     place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 8) {
            place_8 = 'X';
            System.out.println("O for first player and X for Second player:"
+
```

```java
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 9) {
            place_9 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
        else
            System.out.println("You picked wrong location");

        System.out.println("Player_1 please select place: ");
        player1 = scan.nextInt();
        if (player1 == 1) {
            place_1 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 2) {
            place_2 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 3) {
            place_3 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
```

```java
        else if (player1 == 4) {
            place_4 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 5) {
            place_5 ='O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 6) {
            place_6 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );


        }
        else if (player1 == 7) {
            place_7 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 8) {
            place_8 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
```

```java
        }
        else if (player1 == 9) {
            place_9 ='O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else
            System.out.println("You picked wrong location");
        if (place_1 == 'O' && place_2 == 'O' && place_3 == 'O' || place_1 ==
'O' && place_4 == 'O' && place_7 == 'O' || place_1 == 'O' && place_5 == 'O'
&& place_9 == 'O' || place_4 == 'O' && place_5 == 'O' && place_6 == 'O' ||
place_7 == 'O' && place_8 == 'O' && place_9 == 'O' || place_3 == 'O' &&
place_6 == 'O' && place_9 == 'O' || place_2 == 'O' && place_5 == 'O' &&
place_8 == 'O') {
            System.out.print("Player 1 won the game");
            System.exit(0);
        }
        else if (place_1 == 'X' && place_2 == 'X' && place_3 == 'X' ||
place_1 == 'X' && place_4 == 'X' && place_7 == 'X' || place_1 == 'X' &&
place_5 == 'X' && place_9 == 'X' || place_4 == 'X' && place_5 == 'X' &&
place_6 == 'X' || place_7 == 'X' && place_8 == 'X' && place_9 == 'X' ||
place_3 == 'X' && place_6 == 'X' && place_9 == 'X' || place_2 == 'X' &&
place_5 == 'X' && place_8 == 'X'  ) {
            System.out.println("Player 2 won the game");
            System.exit(0);
        }
        else
            System.out.println("Game in Progress");

        System.out.println("Player_2 please select place: ");
        player2 = scan.nextInt();
        if (player2 == 1) {
            place_1 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 2) {
            place_2 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
```

```java
        }
        else if (player2 == 3) {
            place_3 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 4) {
            place_4 = 'X';

            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 5) {
            place_5 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 6) {
            place_6 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 7) {
            place_7 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
```

```java
                            "\n--|---|--" +
                            "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 8) {
            place_8 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                            "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                            "\n--|---|--" +
                            "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                            "\n--|---|--" +
                            "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 9) {
            place_9 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                            "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                            "\n--|---|--" +
                            "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                            "\n--|---|--" +
                            "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else
            System.out.println("You picked wrong location");
        if (place_1 == 'O' && place_2 == 'O' && place_3 == 'O' || place_1 ==
'O' && place_4 == 'O' && place_7 == 'O' || place_1 == 'O' && place_5 == 'O'
&& place_9 == 'O' || place_4 == 'O' && place_5 == 'O' && place_6 == 'O' ||
place_7 == 'O' && place_8 == 'O' && place_9 == 'O' || place_3 == 'O' &&
place_6 == 'O' && place_9 == 'O' || place_2 == 'O' && place_5 == 'O' &&
place_8 == 'O') {
            System.out.print("Player 1 won the game");
            System.exit(0);
        }
        else if (place_1 == 'X' && place_2 == 'X' && place_3 == 'X' ||
place_1 == 'X' && place_4 == 'X' && place_7 == 'X' || place_1 == 'X' &&
place_5 == 'X' && place_9 == 'X' || place_4 == 'X' && place_5 == 'X' &&
place_6 == 'X' || place_7 == 'X' && place_8 == 'X' && place_9 == 'X' ||
place_3 == 'X' && place_6 == 'X' && place_9 == 'X' || place_2 == 'X' &&
place_5 == 'X' && place_8 == 'X'  ) {
            System.out.println("Player 2 won the game");
            System.exit(0);
        }
        else
            System.out.println("Game in progress");


        System.out.println("Player_1 please select place: ");
        player1 = scan.nextInt();
        if (player1 == 1) {
            place_1 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                            "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
```

```java
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 2) {
            place_2 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
        }
        else if (player1 == 3) {
            place_3 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 4) {
            place_4 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 5) {
            place_5 ='O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 6) {
            place_6 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
```

```java
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );


        }
        else if (player1 == 7) {
            place_7 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );


        }
        else if (player1 == 8) {
            place_8 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );


        }
        else if (player1 == 9) {
            place_9 ='O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );


        }
        else
            System.out.println("You picked wrong location");
        if (place_1 == 'O' && place_2 == 'O' && place_3 == 'O' || place_1 ==
'O' && place_4 == 'O' && place_7 == 'O' || place_1 == 'O' && place_5 == 'O'
&& place_9 == 'O' || place_4 == 'O' && place_5 == 'O' && place_6 == 'O' ||
place_7 == 'O' && place_8 == 'O' && place_9 == 'O' || place_3 == 'O' &&
place_6 == 'O' && place_9 == 'O' || place_2 == 'O' && place_5 == 'O' &&
place_8 == 'O') {
            System.out.print("Player 1 won the game");
            System.exit(0);
        }
        else if (place_1 == 'X' && place_2 == 'X' && place_3 == 'X' ||
place_1 == 'X' && place_4 == 'X' && place_7 == 'X' || place_1 == 'X' &&
place_5 == 'X' && place_9 == 'X' || place_4 == 'X' && place_5 == 'X' &&
place_6 == 'X' || place_7 == 'X' && place_8 == 'X' && place_9 == 'X' ||
place_3 == 'X' && place_6 == 'X' && place_9 == 'X' || place_2 == 'X' &&
place_5 == 'X' && place_8 == 'X'   ) {
```

```java
            System.out.println("Player 2 won the game");
            System.exit(0);
        }
        else
            System.out.println("Game in Progress");

        System.out.println("Player_2 please select place: ");
        player2 = scan.nextInt();
        if (player2 == 1) {
            place_1 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 2) {
            place_2 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 3) {
            place_3 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 4) {
            place_4 = 'X';

            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 5) {
            place_5 = 'X';
```

```java
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
        }

        else if (player2 == 6) {
            place_6 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 7) {
            place_7 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 8) {
            place_8 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 9) {
            place_9 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else
            System.out.println("You picked wrong location");
        if (place_1 == 'O' && place_2 == 'O' && place_3 == 'O' || place_1 ==
'O' && place_4 == 'O' && place_7 == 'O' || place_1 == 'O' && place_5 == 'O'
```

```java
        && place_9 == 'O' || place_4 == 'O' && place_5 == 'O' && place_6 == 'O' ||
place_7 == 'O' && place_8 == 'O' && place_9 == 'O' || place_3 == 'O' &&
place_6 == 'O' && place_9 == 'O' || place_2 == 'O' && place_5 == 'O' &&
place_8 == 'O') {
            System.out.print("Player 1 won the game");
            System.exit(0);
        }
        else if (place_1 == 'X' && place_2 == 'X' && place_3 == 'X' ||
place_1 == 'X' && place_4 == 'X' && place_7 == 'X' || place_1 == 'X' &&
place_5 == 'X' && place_9 == 'X' || place_4 == 'X' && place_5 == 'X' &&
place_6 == 'X' || place_7 == 'X' && place_8 == 'X' && place_9 == 'X' ||
place_3 == 'X' && place_6 == 'X' && place_9 == 'X' || place_2 == 'X' &&
place_5 == 'X' && place_8 == 'X') {
            System.out.println("Player 2 won the game");
            System.exit(0);
        }
        else
            System.out.println("Game In progress");



        System.out.println("Player_1 please select place: ");
        player1 = scan.nextInt();
        if (player1 == 1) {
            place_1 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 2) {
            place_2 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 3) {
            place_3 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );

        }
```

```java
        else if (player1 == 4) {
            place_4 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 5) {
            place_5 ='O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 6) {
            place_6 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );


        }
        else if (player1 == 7) {
            place_7 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
        }
        else if (player1 == 8) {
            place_8 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
```

```java
        else if (player1 == 9) {
            place_9 ='O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else
            System.out.println("You picked wrong location");
        if (place_1 == 'O' && place_2 == 'O' && place_3 == 'O' || place_1 ==
'O' && place_4 == 'O' && place_7 == 'O' || place_1 == 'O' && place_5 == 'O'
&& place_9 == 'O' || place_4 == 'O' && place_5 == 'O' && place_6 == 'O' ||
place_7 == 'O' && place_8 == 'O' && place_9 == 'O' || place_3 == 'O' &&
place_6 == 'O' && place_9 == 'O' || place_2 == 'O' && place_5 == 'O' &&
place_8 == 'O') {
            System.out.print("Player 1 won the game");
            System.exit(0);
        }
        else if (place_1 == 'X' && place_2 == 'X' && place_3 == 'X' ||
place_1 == 'X' && place_4 == 'X' && place_7 == 'X' || place_1 == 'X' &&
place_5 == 'X' && place_9 == 'X' || place_4 == 'X' && place_5 == 'X' &&
place_6 == 'X' || place_7 == 'X' && place_8 == 'X' && place_9 == 'X' ||
place_3 == 'X' && place_6 == 'X' && place_9 == 'X' || place_2 == 'X' &&
place_5 == 'X' && place_8 == 'X') {
            System.out.println("Player 2 won the game");
            System.exit(0);
        }
        else
            System.out.println("Game In progress");

        System.out.println("Player_2 please select place: ");
        player2 = scan.nextInt();
        if (player2 == 1) {
            place_1 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 2) {
            place_2 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
```

```java
        }
        else if (player2 == 3) {
            place_3 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
        }

        else if (player2 == 4) {
            place_4 = 'X';

            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player2 == 5) {
            place_5 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
        }

        else if (player2 == 6) {
            place_6 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 7) {
            place_7 = 'X';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );
```

```java
            }
        else if (player2 == 8) {
            place_8 = 'X';
            System.out.println("O for first player and X for Second player:" +
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player2 == 9) {
            place_9 = 'X';
            System.out.println("O for first player and X for Second player:" +
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else
            System.out.println("You picked wrong location");
        if (place_1 == 'O' && place_2 == 'O' && place_3 == 'O' || place_1 ==
'O' && place_4 == 'O' && place_7 == 'O' || place_1 == 'O' && place_5 == 'O'
&& place_9 == 'O' || place_4 == 'O' && place_5 == 'O' && place_6 == 'O' ||
place_7 == 'O' && place_8 == 'O' && place_9 == 'O' || place_3 == 'O' &&
place_6 == 'O' && place_9 == 'O' || place_2 == 'O' && place_5 == 'O' &&
place_8 == 'O') {
            System.out.print("Player 1 won the game");
            System.exit(0);
        }
        else if (place_1 == 'X' && place_2 == 'X' && place_3 == 'X' ||
place_1 == 'X' && place_4 == 'X' && place_7 == 'X' || place_1 == 'X' &&
place_5 == 'X' && place_9 == 'X' || place_4 == 'X' && place_5 == 'X' &&
place_6 == 'X' || place_7 == 'X' && place_8 == 'X' && place_9 == 'X' ||
place_3 == 'X' && place_6 == 'X' && place_9 == 'X' || place_2 == 'X' &&
place_5 == 'X' && place_8 == 'X') {
            System.out.println("Player 2 won the game");
            System.exit(0);
        }
        else
            System.out.println("Game In progress");
        System.out.println("Player_1 please select place: ");


        player1 = scan.nextInt();
        if (player1 == 1) {
            place_1 = 'O';
            System.out.println("O for first player and X for Second player:" +
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
```

```java
                                "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 2) {
            place_2 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }
        else if (player1 == 3) {
            place_3 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 4) {
            place_4 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 5) {
            place_5 ='O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
                        "\n--|---|--" +
                        "\n"+    place_7 + " | " + place_8 + " | " + place_9 );

        }

        else if (player1 == 6) {
            place_6 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                        "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                        "\n--|---|--" +
                        "\n"+    place_4 + " | " + place_5 + " | " + place_6 +
```

```java
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );



        }
        else if (player1 == 7) {
            place_7 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );
        }
        else if (player1 == 8) {
            place_8 = 'O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );
        }
        else if (player1 == 9) {
            place_9 ='O';
            System.out.println("O for first player and X for Second player:"
+
                    "\n" +   place_1 + " | " + place_2 + " | " + place_3 +
                    "\n--|---|--" +
                    "\n"+   place_4 + " | " + place_5 + " | " + place_6 +
                    "\n--|---|--" +
                    "\n"+   place_7 + " | " + place_8 + " | " + place_9 );


        }
        else
            System.out.println("You picked wrong location");
        if (place_1 == 'O' && place_2 == 'O' && place_3 == 'O' || place_1 ==
'O' && place_4 == 'O' && place_7 == 'O' || place_1 == 'O' && place_5 == 'O'
&& place_9 == 'O' || place_4 == 'O' && place_5 == 'O' && place_6 == 'O' ||
place_7 == 'O' && place_8 == 'O' && place_9 == 'O' || place_3 == 'O' &&
place_6 == 'O' && place_9 == 'O' || place_2 == 'O' && place_5 == 'O' &&
place_8 == 'O') {
            System.out.print("Player 1 won the game");
            System.exit(0);
        }
        else if (place_1 == 'X' && place_2 == 'X' && place_3 == 'X' ||
place_1 == 'X' && place_4 == 'X' && place_7 == 'X' || place_1 == 'X' &&
place_5 == 'X' && place_9 == 'X' || place_4 == 'X' && place_5 == 'X' &&
place_6 == 'X' || place_7 == 'X' && place_8 == 'X' && place_9 == 'X' ||
place_3 == 'X' && place_6 == 'X' && place_9 == 'X' || place_2 == 'X' &&
place_5 == 'X' && place_8 == 'X'  ) {
            System.out.println("Player 2 won the game");
            System.exit(0);
        }
```

```java
        else
            System.out.println("Draw");



    }
}
```