// GameInterface.java

import java.rmi.Remote;

import java.rmi.RemoteException;

public interface GameInterface extends Remote {

String guessNumber(int guess) throws RemoteException;

}

// GameServer.java

import java.rmi.Naming;

import java.rmi.RemoteException;

import java.rmi.server.UnicastRemoteObject;

import java.util.Random;

public class GameServer extends UnicastRemoteObject implements GameInterface {

private int secretNumber;

protected GameServer() throws RemoteException {

super();

secretNumber = new Random().nextInt(10) + 1; // Random number between 1-10

System.out.println("Secret number generated: " + secretNumber);

}

@Override

public String guessNumber(int guess) throws RemoteException {

if (guess == secretNumber) {

secretNumber = new Random().nextInt(10) + 1; // Reset game

return "Correct! You guessed it. A new number is generated.";

} else if (guess < secretNumber) {

return "Too low! Try again.";

} else {

return "Too high! Try again.";

}

}

public static void main(String[] args) {

try {

Naming.rebind("GameServer", new GameServer());

System.out.println("Game Server is ready.");

} catch (Exception e) {

System.out.println("Server failed: " + e);

}

}

}

// GameClient.java

import java.rmi.Naming;

import java.util.Scanner;

public class GameClient {

public static void main(String[] args) {

try {

GameInterface game = (GameInterface) Naming.lookup("GameServer");

Scanner scanner = new Scanner(System.in);

System.out.println("Connected to the Game Server!");

while (true) {

System.out.print("Enter your guess (1-10): ");

int guess = scanner.nextInt();

String response = game.guessNumber(guess);

System.out.println(response);

}

} catch (Exception e) {

System.out.println("Client error: " + e);

}

}

}

Output:

rmiregistry 1099 &

javac \*.java

java GameServer

In 2 terminals : java GameClient (multiplayers)

Secret number generated: 10

Game Server is ready.

Connected to the Game Server!

Enter your guess (1-10): 9

Too low! Try again.

Enter your guess (1-10): 10

Correct! You guessed it. A new number is generated.

Enter your guess (1-10): 2

Too high! Try again.