

```

import java.util.Scanner;
import java.util.Random;

public class MultiplicationTables
{
    public static int multiplicationTables(int numberOfProblems)
    {
        int[] deck = {1,2,3,4,5,6,7,8,9,10,11,12};
        Scanner scan = new Scanner(System.in);
        Random random = new Random();
        int numberCorrect = 0;
        for (int i = 0; i < numberOfProblems; i++)
        {
            int number1 = deck[random.nextInt(deck.length)];
            int number2 = deck[random.nextInt(deck.length)];

            int product = number1 * number2;

            System.out.println("What is " + number1 + " x " + number2 + " ?");
            int userAnswer = scan.nextInt();

            if (product == userAnswer)
            {
                numberCorrect++;
                System.out.println("Great Job! " + product + " is correct!");
            }
            else if (userAnswer <= product + 5 && userAnswer >= product - 5)
                System.out.println("Close! The right answer was " + product + ".");
            else
                System.out.println("Incorrect! The right answer was " + product +
".");

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

        }
        return numberCorrect;
    }
    public static void main(String[] args)
    {
        Scanner scan = new Scanner(System.in);
        Random random = new Random();

```

```
        System.out.println("Welcome to MultiplicationTables!");
        System.out.println("This program will help you learn and remember you're
basic multiplication tables from numbers 1 to 12 by generating problems");
        System.out.println("The program will also tell you whether you got the
answer right, were close (within 5 of the correct answer), or were incorrect. \n");

        System.out.print("How many problems would you like to do?");
        int numberOfProblems = scan.nextInt();
        System.out.print("\n");

        int numberCorrect = multiplicationTables(numberOfProblems);
        System.out.println("You have completed your Multiplication Tables!");
        System.out.println("You answered " + numberCorrect + " out of " +
numberOfProblems + " correct!");
    }

}
```