JFo Section 6 Practice Programs

TrafficDataD... ValidPin.java × TrafficSigna... DatabaseCon... TrafficSigna... Main.java RandomNum.java RandomDouble... Co

```java
package pri;
import java.util.Scanner;
public class ValidPin {
/*Develop a java program to validate bank PIN of a customer. Use a while loop to repeat code until a valid PIN is entered.*/
    public static void main(String[] args) {
        final int VALID_PIN = 4132;

        Scanner in = new Scanner(System.in);

        int enteredPin = 0;

        System.out.println("Please enter your PIN:");

        while (enteredPin != VALID_PIN) {
            enteredPin = in.nextInt();

            if (enteredPin != VALID_PIN) {
                System.out.println("Incorrect PIN. Please try again:");
            }
        }
        in.close();

        System.out.println("Correct PIN entered. You now have access to your account.");
    }
}
```

Console ×

```
<terminated> ValidPin [Java Application] C:\Users\DELL\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v20240426-1149\jre\bin\javaw.exe  (2 Aug 20
Please enter your PIN:
1234
Incorrect PIN. Please try again:
0000
Incorrect PIN. Please try again:
666
Incorrect PIN. Please try again:
4132
Correct PIN entered. You now have access to your account.
```

TrafficDataD... ValidPin.java Multiples.java × TrafficSigna... DatabaseCon... TrafficSigna... RandomNum.java RandomDouble... Rand

```java
package pri;
import java.util.Scanner;
/*Develop a java program to calculate the multiples of a given number using a for loop.*/
public class Multiples {

    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        System.out.print("Choose a number: ");
        int num = in.nextInt();

        for (int i = 1; i <= 12; i++) {
            System.out.println(num + "x" + i + " = " + (num * i));
        }
        in.close();
    }
}
```

Console ×

```
<terminated> Multiples [Java Application] C:\Users\DELL\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v20240426-1149\jre\bin\javaw.exe  (2 Aug 2024, 3:
Choose a number: 3
3x1 = 3
3x2 = 6
3x3 = 9
3x4 = 12
3x5 = 15
3x6 = 18
3x7 = 21
3x8 = 24
3x9 = 27
3x10 = 30
3x11 = 33
3x12 = 36
```

TrafficDataD... ValidPin.java Multiples.java TrafficSigna... DatabaseCon... ASCIIArt.java TrafficSigna... RandomNum.java RandomDou

```java
package pri;
/*Program to create ASCII Art of rectangle and a triangle*/
public class ASCIIArt {

    public static void main(String[] args) {

        System.out.println("ASCII Art of Rectangle:");
        createRectangle(5, 4);
        System.out.println();
        System.out.println("ASCII Art of Triangle:");
        createTriangle(5);
    }

    public static void createRectangle(int width, int height) {
        if (width < 1 || height < 1) {
            System.out.println("Invalid dimensions. Both width and height must be greater than 0.");
            return;
        }

        for (int i = 0; i < height; i++) {
            for (int j = 0; j < width; j++) {
                System.out.print("#");
            }
            System.out.println();
        }
    }

    public static void createTriangle(int leg) {
        if (leg < 1) {
            System.out.println("Invalid dimension. Leg length must be greater than 0.");
            return;
        }

        for (int i = 1; i <= leg; i++) {
            for (int j = 0; j < i; j++) {
                System.out.print("#");
            }
            System.out.println();
        }
    }
}
```

Console

<terminated> ASCIIArt [Java Application] C:\Users\DELL\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.1.v20240426-1149\jre\bin\javaw.

```
ASCII Art of Rectangle:
#####
#####
#####
#####

ASCII Art of Triangle:
#
##
###
####
#####
```