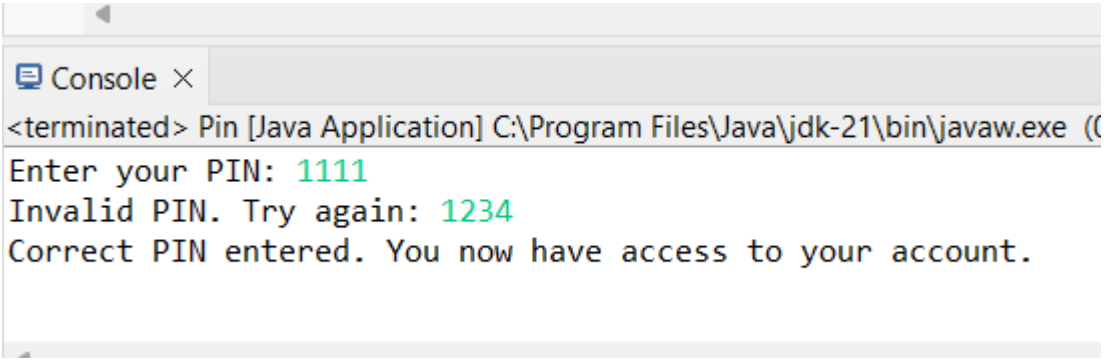
PRACTICE SECTION 6

1.

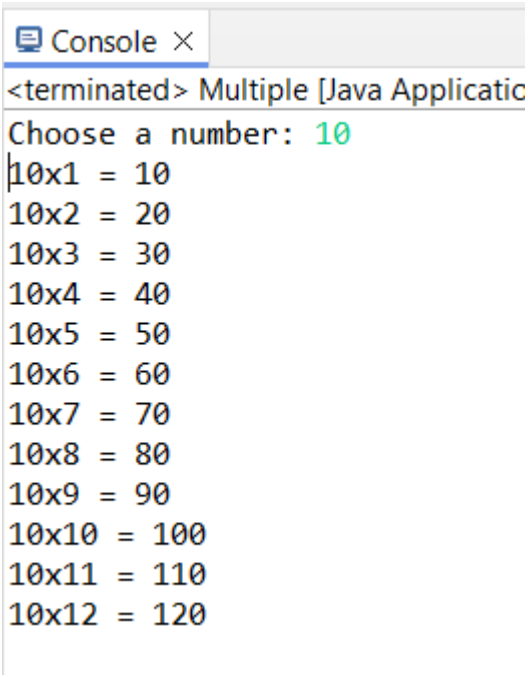
```
package pin;

import java.util.Scanner;

public class Pin {

        public static void main(String[] args) {

    int validPin = 1234;


    Scanner scanner = new Scanner(System.in);


    System.out.print("Enter your PIN: ");


    int enteredPin = scanner.nextInt();


    while (enteredPin != validPin) {

       System.out.print("Invalid PIN. Try again: ");

       enteredPin = scanner.nextInt();

    }

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

  }

}
```



2.

```
package multiple;
```

```
import java.util.Scanner;


public class Multiple {
        public static void main(String[] args) {
            // Create a Scanner object to read user input
            Scanner scanner = new Scanner(System.in);

            // Prompt the user to enter a number
            System.out.print("Choose a number: ");

            // Read the user's input and store it in a variable
            int number = scanner.nextInt();

            // Use a for loop to display the multiples of the number from 1 to 12
            for (int i = 1; i <= 12; i++) {
               int multiple = number * i;
               System.out.println(number + "x" + i + " = " + multiple);
            }
         }
}
```



3.

```
package loopshape;


public class Loopshape {

        public static void createRectangle(int width, int height) {
            if (width < 1 || height < 1) {
               System.out.println("Cannot draw a shape with a dimension less than 1.");
               return;
            }

            // Print the top border
            for (int i = 0; i < width; i++) {
               System.out.print("#");
            }
            System.out.println();

            // Print the middle rows
            for (int i = 0; i < height - 2; i++) {
               System.out.print("#");
```

```
        for (int j = 0; j < width - 2; j++) {
            System.out.print(" ");
        }
        System.out.println("#");
    }

    // Print the bottom border
    if (height > 1) {
        for (int i = 0; i < width; i++) {
            System.out.print("#");
        }
        System.out.println();
    }
}

public static void createTriangle(int size) {
    if (size < 1) {
        System.out.println("Cannot draw a shape with a dimension less than 1.");
        return;
    }

    // Print the triangle
    for (int i = 0; i < size; i++) {
        for (int j = 0; j <= i; j++) {
            System.out.print("#");
        }
        System.out.println();
    }
}

public static void main(String[] args) {
```

```
        createRectangle(5, 4);
        System.out.println();
        createTriangle(5);
}
}
```