

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);
        }
    }
}

```

