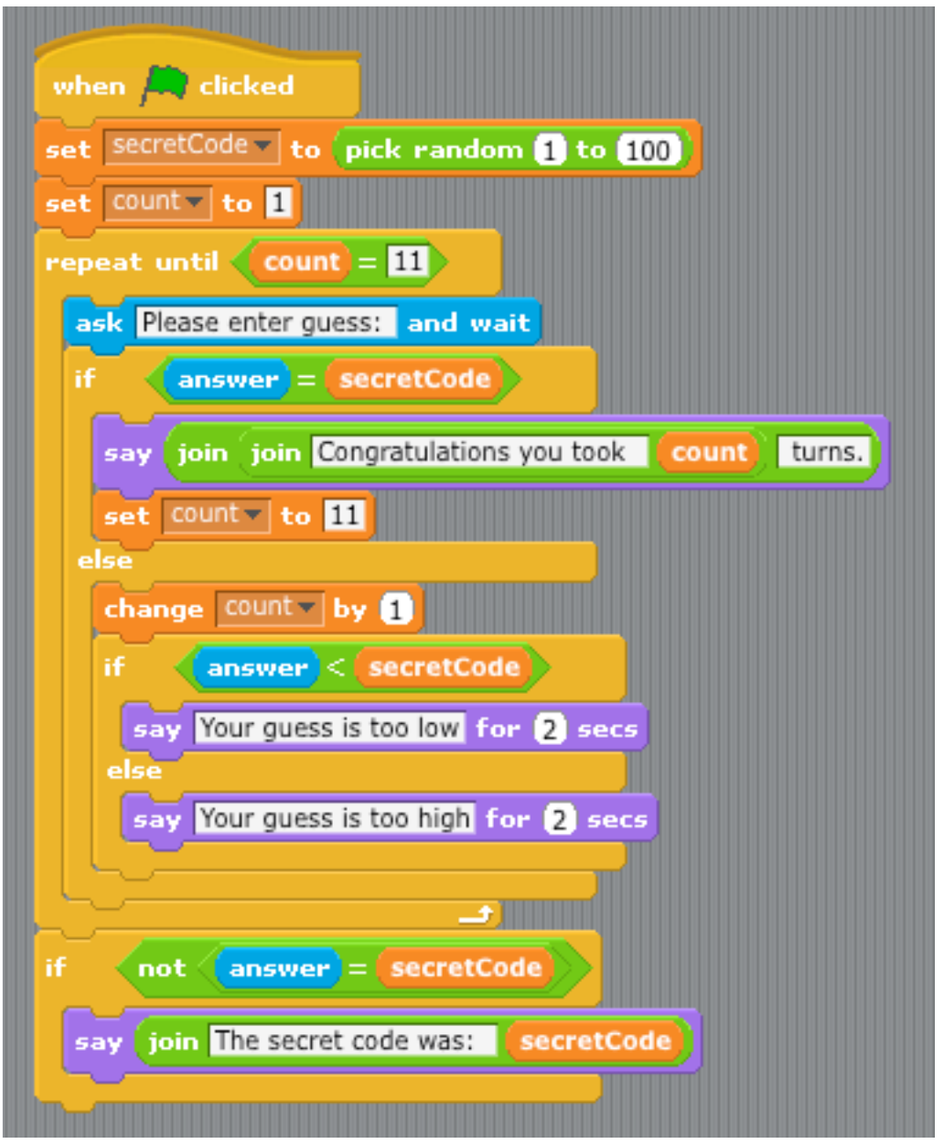
Selected Assignment #4 Solutions:

Q1: Demonstrated in class

Q2: Guesser

In Scratch:



Sample run:

Q2, in Java:

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

public class guesser
{
	public static void main(String[] args)
	{
	Random rnd = new Random();
	Scanner console = new Scanner(System.in);

	int theNumber = rnd.nextInt(100) + 1;
	int counter = 1;

	System.out.println();
	System.out.println("Welcome to the guesser game where you attempt to guess ");
	System.out.println("the secret number in as few a turns as possible.  For ");
	System.out.println("each turn I will tell you if you are too low, too high, ");
	System.out.println("or if you guessed the secret number.  I will also tell you ");
	System.out.println("the number of turns you took.");
	System.out.println();

	for (int i = 1; i <= 10; i++)
		{
		System.out.print("Enter guess: ");
		int value = console.nextInt();

		if (value == theNumber)
			{
			System.out.print("Congratulations, turns required to find the ");
			System.out.println("secret number: " + counter);

			break;
			}
		else if (value < theNumber)
			System.out.println("Your guess is too low.");
		else
			System.out.println("Your guess is too high.");

		counter++;	// increment after incorrect guess
		}

	if (counter > 10)
		System.out.println("The secret code was: " + theNumber);
	}
}
```

Sample run shown as part of the assignment.