Selected Assignment #4 Solutions:

Q1: Demonstrated in class

Q2: Guesser

In Scratch:

```
when clicked

set secretCode to pick random 1 to 100

set count to 1

repeat until count = 11

ask Please enter guess: and wait

if answer = secretCode

say join join Congratulations you took count turns.

set count to 11

else

change count by 1

if answer < secretCode

say Your guess is too low for 2 secs

else

say Your guess is too high for 2 secs

if not answer = secretCode

say join The secret code was: secretCode
```

Sample run:



```
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 the Number = 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 \le 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.