Sample Programs from last class:

```
when clicked 1 => heads

set coin to 0

set nHeads to 0

reset timer

repeat 100

set coin to pick random 1 to 2

if coin = 1

change nHeads by 1

say nHeads

say timer
```

Above program performs the following:

- 1. Simulates tossing a coin 100 times
- 2. Determines and output the number of times a heads was tossed
- 3. Calculates the elapsed time to run the program

```
when clicked

set nTails to 0

set coin to 0

set nHeads to 0

reset timer

repeat 1000

set coin to pick random 1 to 6000

if coin = 6000

play sound meow say On the edge!

else

if coin < 3001

change nHeads by 1

else

change nTails by 1

say join nHeads join , nTails
```

Above program performs the following:

- 1. Simulates tossing a coin 1000 times
- 2. Determines and output the number of times a heads and tails were tossed
- 3. Simulates the highly unlikely, but not impossible, case where the coin lands on its edge
 - a. For this simulation, it is expected that the coin will land on its edge every 1 out of 6000 times.

Please be sure you can identify the following items:

- 1. Counters
- 2. Comments
- 3. Conditionals (if-statements)
- 4. Loops (repeat-statements)
- 5. Input
- 6. Output
- 7. Major processing
 - a. Use of random number generator
 - b. How the edge case (coin landing on its edge) is simulated