## MTH 337 Sample Quiz 3 $\,$

You will have **15 minutes** to take the actual quiz.

- 1. Import the random library.
- 2. Write your own binomial function that takes two inputs, n and p, that flips an unfair coin (probability of heads p) n times and returns the result.
- 3. Run this function 10000 times for a fair coin with 100 trials and approximate the probability of getting a result that is between 40 and 45, less than 40, or greater than 55.
- 4. Graph the results using a bar graph.