**STU22004 – Lab Assignment 2**

**Hint: For each question you are required to calculate the mean of results for 200 iterations.**

**Q1.**

Using 10,000 random samples, estimate the number of required dice rolling to get each face at least once.

**Q2.**

Assume that cards, numbered from to , are place on a desk, faced down. You are going to guess the numbers on the cards. You would randomly guess the cards by saying numbers between to . Obviously, you would use each number once to guess. Therefore, a guess such 2,2, …, 2 is not acceptable!

For =6, 7, 8, 9, 10, and using 10,000 random samples, estimate the probability that none of the numbers that you guess are correct. Plot the result of probabilities vs. k.

Submit **one** R Script. The file name has to be in this format:

A2-Firstname-Surname.R Example: **A2-Bahman-Honari.R**