Question 1)
The exact values of the standard errors here aren't as important as just playing with the different estimation methods. It is notable that MLE does not in general obtain the same SE's as OLS. This problem is meant to be a nice example of a case where parallelization can actually save some time — a single bootstrap takes several seconds, which for a computer is non-trivial. Distributing 100 bootstraps over 20 cores considerably reduces total computation time as a result.

Question 2:
See Figure 1. Interestingly, after $n = 10$, the distribution of the number of hits is almost entirely independent of the size of n — a rather surprising result!

Question 3:

A) With no uncertainty, a saving rate of around 11-11.25% guarantees hitting the 10x goal.

B) See Figure 2. With uncertainty, saving 11.25 of earnings only results in the agent hitting 10x around 45% of the time. A saving rate of around 15% results in a considerably higher probability of hitting the goal.
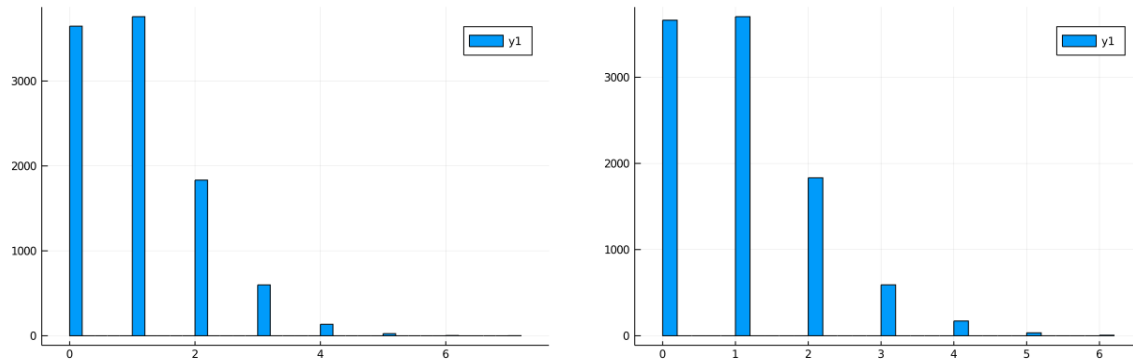
Figure 1: Question 1

Figure 2: Question 2