

Question 1. Simulate a sample of 10 movies drawn at random with replacement from the 200 movies. Outputs True if Paramount appears more often than Warner Brothers among studios that released the sampled movies, and False otherwise. **(4 points)**

Example Answer: (i) studios_of_all_movies, (iii) top, (v)

Note: Do not explain your answer for any of the options you've chosen; please follow the structure of the example answer provided.

(i)top, (ii)studios_of_all_movies, (iii)studio_proportions_only

Question 2. Simulate a sample of 10 movies drawn at random with replacement from the 200 movies. Outputs True if the first sampled movie was released by the same studio as the last sampled movie. (4 points)

Example Answer: (i) studios_of_all_movies, (iii) top, (v)

Note: Do not explain your answer for any of the options you've chosen; please follow the structure of the example answer provided.

(i)top, (ii)studios_of_all_movies, (vi)

Question 5. Given your observed value, do you believe that Jade's model is reasonable, or is our alternative (that our deck is rigged) more likely? Explain your answer using the histogram produced above. **(5 Points)**

I believe that Jade's model is reasonable because the bin 4-5 has the most percentage at about 25%. Since the expected number of face cards in 13 draws is 4, and the percentage is near our probabilities, I think that Jade's model is reasonable.

