

Assignment 04

1. Let X be a number chosen uniformly at random from $[1, n]$. Find $\mathbf{Var}[X]$.
2. Suppose that we roll a standard fair die 100 times. Let X be the sum of the numbers that appear over the 100 rolls. Use Chebyshev's inequality to bound $\Pr[|X - 350| \geq 50]$.