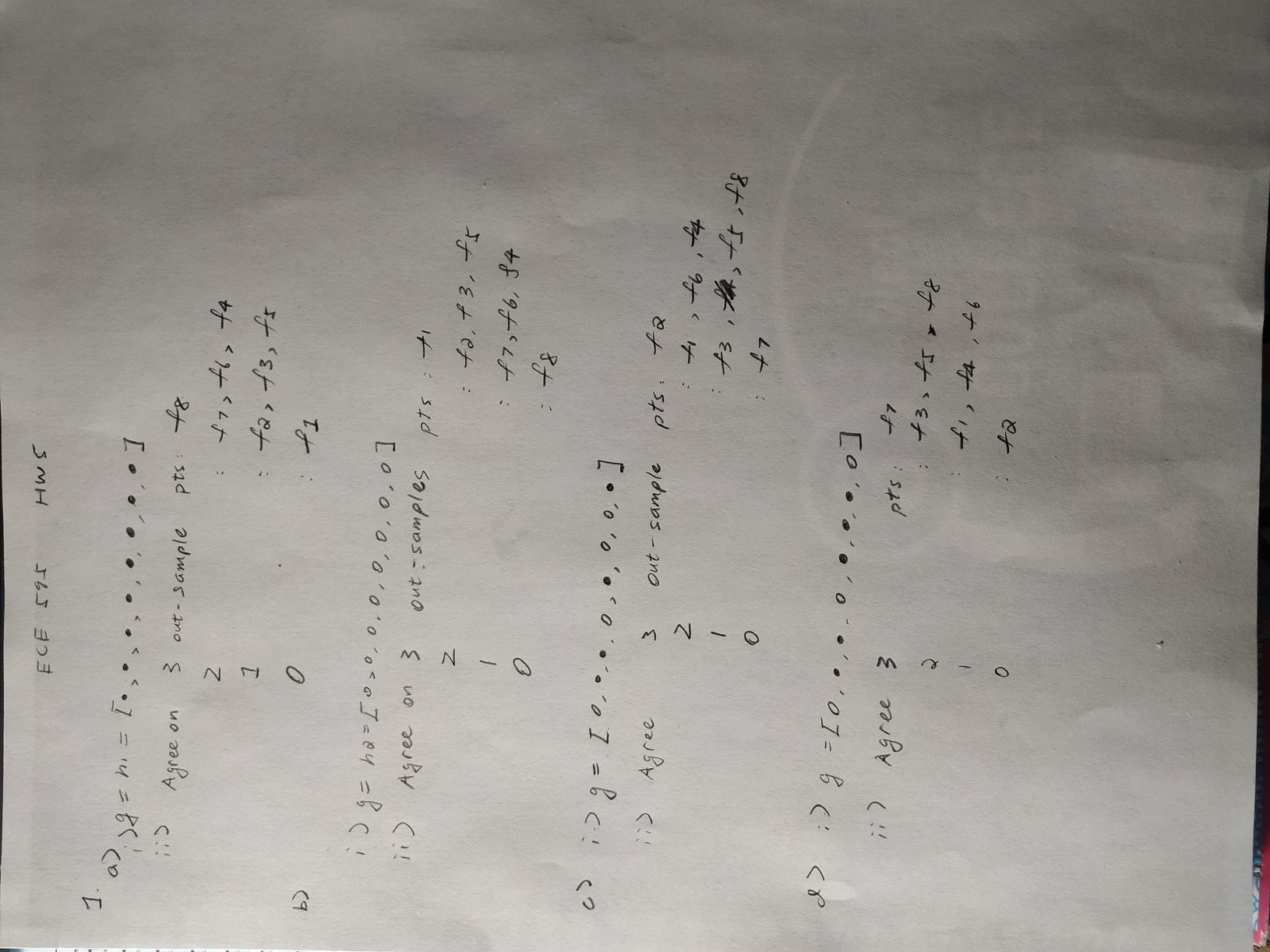
# ECE 595 HW5

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## Apr.1.2021

Exercise 1



Exercise 2

1. μ1 = μrand = μmin = 0.5

2.

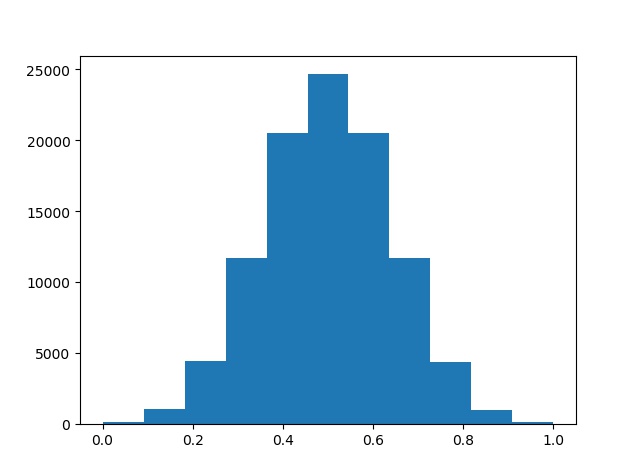


Figure 1. V1

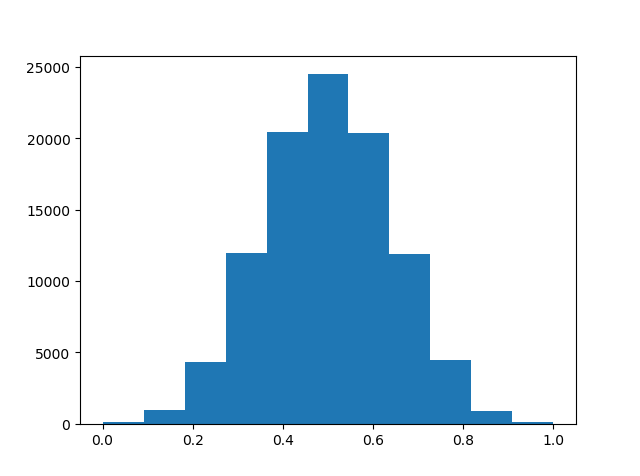


Figure 2. Vrand

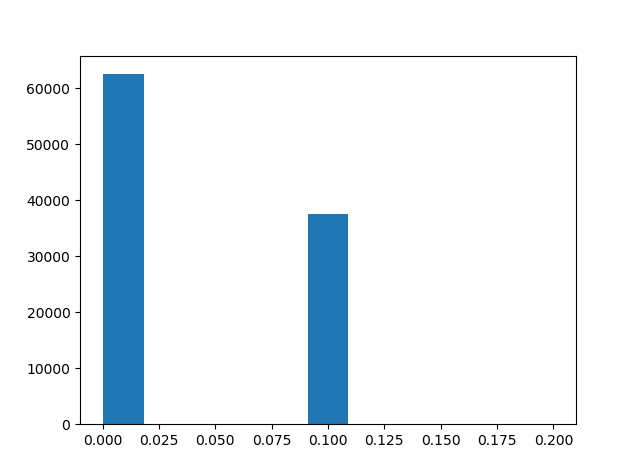
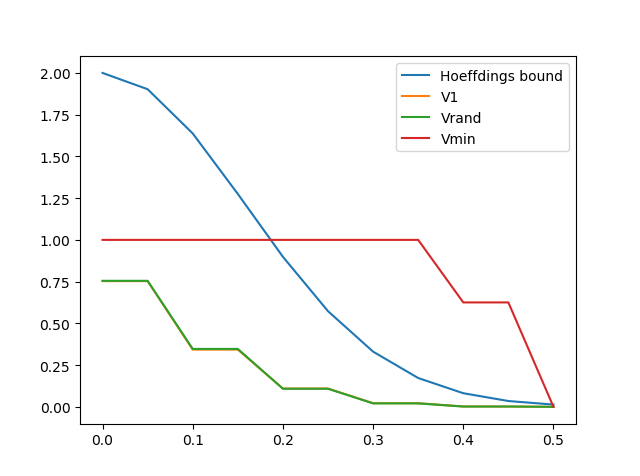


Figure 3. Vmin

3.



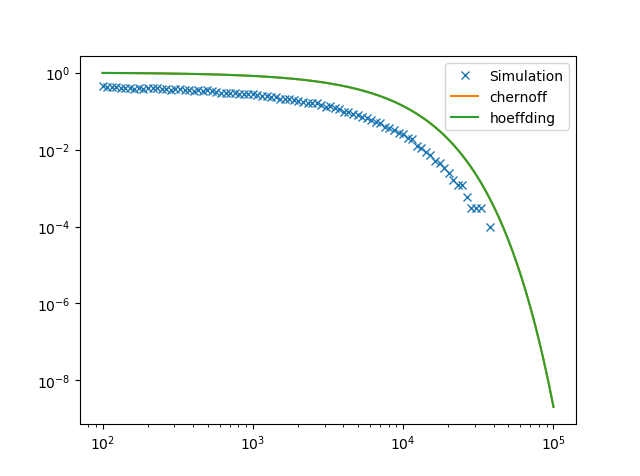
d.

The coin1 and coin\_rand obey the Hoeffding’s bound, and coin\_min does not. That is because the coin\_min is not independent of the samples. E[V1] = E[Vrand] = 0.5.

However, E[Vmin] = 0.04, which is far away from μ.

Exercise 3.

b.



a.

