Stat Questions

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Contents

1 Standard error of median

- `https://archive.ph/eW8MS`

2 Interpret standard error of the mean

3 How to generate a matrix that follows bernoulli distribution in python

```
import numpy as np

def bernoulli_pmf(x,p=0.5):

    f = p**x*(1-p)**(1-x)
    return f
```

```
def get_random_bernoulli(p=0.5):

    if np.random.rand() <= p:
        return 0
    else:
        return 1

bernoulli = np.array([[get_random_bernoulli() for j in range(4)] for i in range(4)])

print(bernoulli)
```

4 Divide each element of the matrix with sum of columns

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5 There are four people in an elevator, four floors in the building, and each person exits at random. Find the probability that:

a) all exit at different floors b) all exit at the same floor c) two get off at one floor and two get off at another

6 https://stats.stackexchange.com/questions/171451/check-whether-a-coin-is-fai

7 What is the expected value of flips to get heads on a fair coin?

8 https://quizlet.com/565183311/probstats-and-ml-interview-questions-flash-car

9 https://www.kaggle.com/getting-started/37489

10 https://www.glassdoor.com/Interview/Google-Data-Scientist-Interview-Questic IE9079.0,6_KO7,21.htm

11 https://igotanoffer.com/blogs/tech/google-data-science-interview

12 https://www.statisticshowto.com/probability-and-statistics/confidence-inter

13 https://archive.ph/V8Gky

(0.2*0.25) + (.15*)