Exercise #1

☞ **Given N coins, only one coin is fake. Its weight is different from the other coins. Using a scale, which can only test which side (left or right) is heavier, find this fake coin.**

☞ **Please**

- ■ **Using divide-and conquer paradigm, design an algorithm to find this fake coin efficiently.**

- ■ **Analyze the asymptotic running time of your algorithm.**

- ■ **Design a program according to your algorithm.**

☞ **Due Date: 2022/11/15**