## **Exercise: Predicting Election Results**

In this exercise, you will predict election results from a sample of randomly chosen people.

#### WE'LL COVER THE FOLLOWING ^

- Task
  - Problem statement 1
  - Problem statement 2

# Task #

Consider an election where one million (1,000,000) people will vote.

- 490,000 people will vote for Mr. Arthur
- 510,000 people will vote for Mr. Ben.

One day before the election, a private company, Octavius, conducts a poll among 1000 randomly chosen voters.

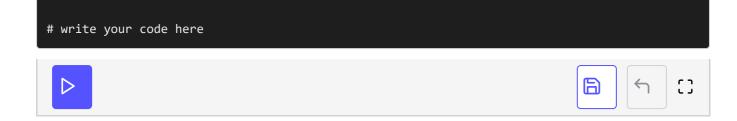
#### Problem statement 1 #

Compute whether Octavius will predict the winner correctly using the approach explained above and print the answer. Voters of Arthur are identified by 0 and those of Ben are identified by 1.

Use the **choice** function to extract random values from the voter sample.



Set the value of seed to 2.



### Problem statement 2 #

Perform the poll **1000** times. Count how many times Arthur wins and how many times Ben wins.

Also, find the probability that Octavius will predict the correct winner based on these **1000** polls of **1000** people.



The solution to this exercise will be discussed in the next lesson.