



Review Session

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Hawken Coding Club
Educational Meeting No. 4



Code Review



Importing

Developers can make their own libraries that you can import for added functions.

Functions of a library are called like this: `nameOfTheLibrary.nameOfFunction()`

Popular Libraries:

<https://www.ubuntupit.com/best-python-libraries-and-packages-for-beginners/>



```
import random
myList = [1,2,3,4]
random.shuffle(myList)
print(myList)
```



```
[2, 4, 3, 1]
```

Random

Common Functions

shuffle

```
import random  
myList = [1,2,3,4]  
random.shuffle(myList)  
print(myList)
```

```
[2, 4, 3, 1]
```

randint

```
print(random.randint(0, 5))
```

```
3
```

Challenge

slido

Simulate the flip of a coin 10000 times. Then print the "The percentage of heads was" followed by the percentage of heads. Do the same for tails.

① Start presenting to display the poll results on this slide.

Challenge #2

slido

You have 10 minutes to make a calculator.
Make as many or as few operations as possible. Ideas (Addition, Subtraction, Multiplication, Division, Exponents, Factorial, Area or Other Measurements of Shapes, etc.)

① Start presenting to display the poll results on this slide.

Challenge #3

slido

Make a random number guesser. Ask the user for the number of guesses and the range of numbers. Then create a random number between 0 and the range. If the user guesses the correct number within the amount of required guesses, reward them. If they don't...

① Start presenting to display the poll results on this slide.

Group Challenge

Make two functions called `hopDistance` and `simulate`. `hopDistance` should return a random number between -2 and 5. `simulate` has two parameters, `distance` and `hops`, and should simulate a frog's attempt to cross a goal line. The frog's starting distance will be 0. The function will return `true` if the frog reaches the goal within the allowed number of hops, and `false` otherwise. Continuously use the `hopDistance` function to get a hop distance until either.

- The frog has reached or passed the goal
- The frog has reached a negative position
- The frog has taken the maximum number of hops without reaching the goal