Python Week 3

Coding leads - November 2023

Let’s build a coin flipping game?

Coin flipping game.
Guess if it’s heads or tails.
Start with £5, lose £2 every time you are wrong, gain £1 every time you are right.

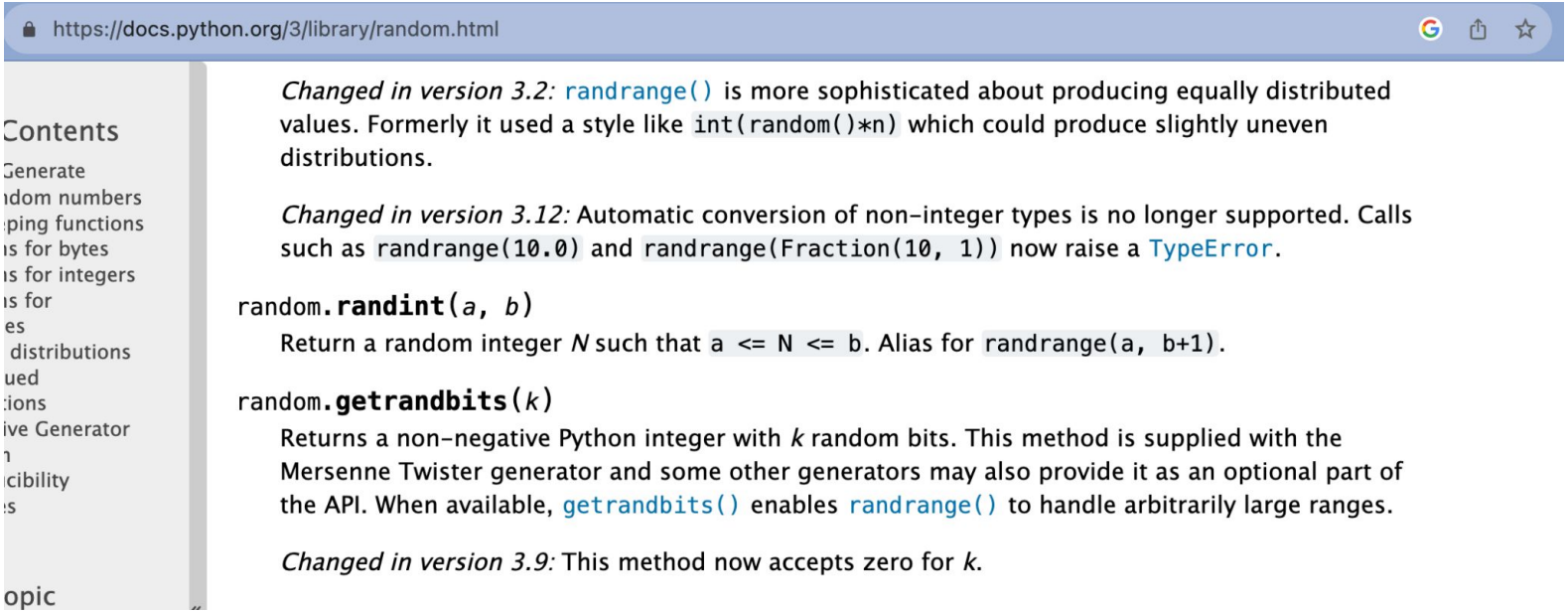
Write a function to get the guess from the user (hint: input)
Write a function to flip the coin (random)
If guess = coin toss -> increase winnings.
Write a function to increase winnings, which can also end the game when winnings reach 0.

```
input(“What’s your guess?”)
```

Note - you need double quotes for the string here because there’s an apostrophe.

Generate a random number

```
import random
random.randint(1,2)
```



From python docs

Dice Game

Ask a user if the dice roll will be higher or lower than a random number (in the same bounds as the dice, so for 1 die 1-6, for 2 dice 2-12, etc.).

Then roll the dice and display whether the user was right or wrong.

Let this loop 5 times and display at the end of the game how many games were won in total and a scoreboard of which games were won and which ones were lost.

Output example:

“Higher or Lower than 4”

- Lower

“You won. The dice rolled 3”

… repeat 5 times.

“You won a total of 3 games. You won game 1, 2, 4”

To-do List

Use an array to make a list of tasks to do (e.g. homework tasks).
Write a function to print out all the tasks.
Write a function to remove a task from the array when it is done.

Resources

https://docs.python.org/3/
https://www.w3schools.com/
Freecodecamp.org

Our GitHub:
https://github.com/Shadyabu/EngAndTechSociety

Downloading. We recommend (all free):

IDEs - nice interfaces to write your code, run your code
https://code.visualstudio.com/
Supports many different languages

https://www.jetbrains.com/community/education/#students
Free for students.
They have different apps for different languages.

Installing python and relevant packages / libraries (specific things e.g. for machine learning, plotting graphs, draw things)
https://brew.sh/
Installing python and packages on macOS

https://www.anaconda.com/
Also has Jupyter notebooks