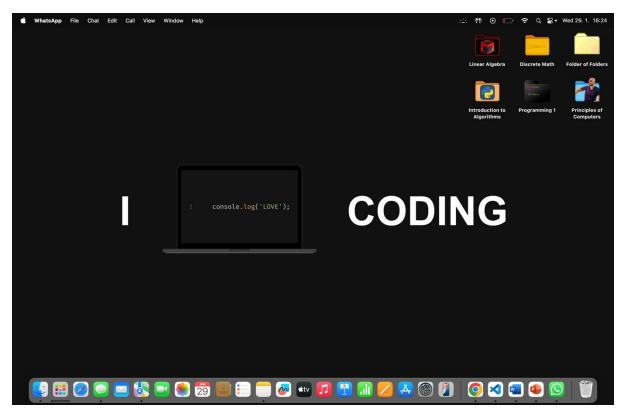
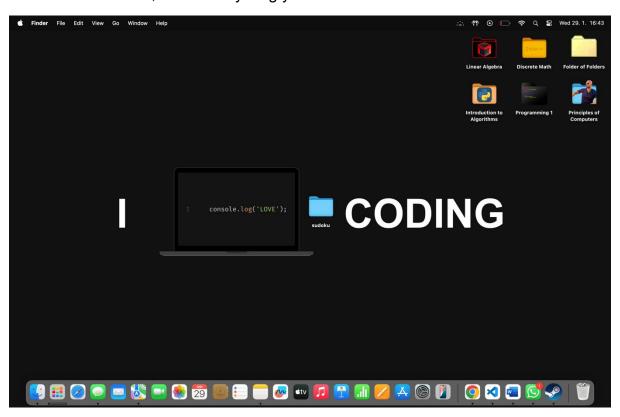
How to start playing?

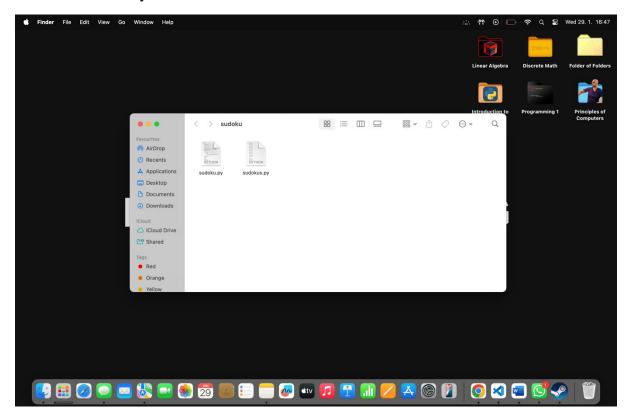
First, open your computer:



Then create a folder, name it anything you like:



Add the necessary files to the folder:

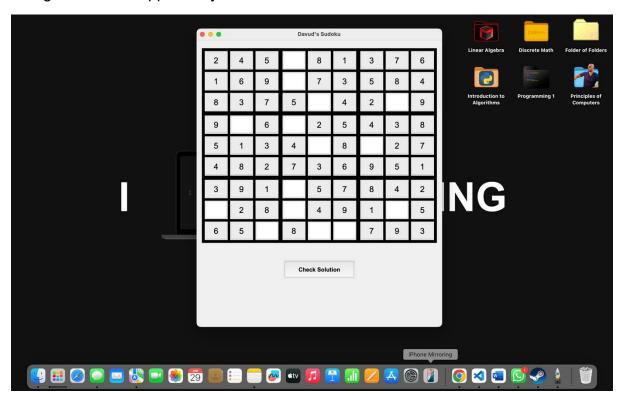


Open the sudoku.py file in VS Code and press the 'run python file' button:

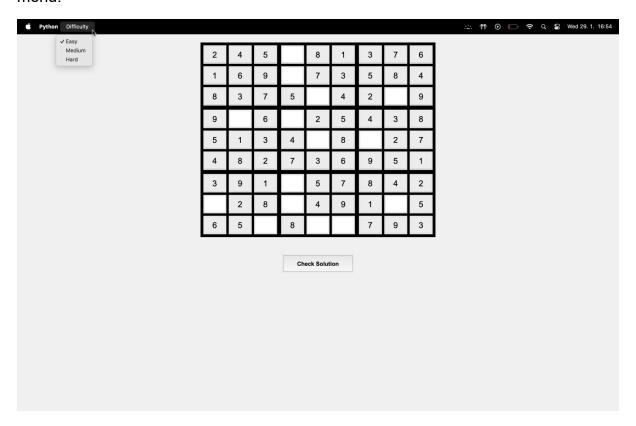
```
← →

    Search
    Se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sudoku.py ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ▷ ~ □ …
P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run Python File
                               Users > davudnasrullayev > Desktop > sudoku > ♠ sudoku.py > ...
                                                           import tkinter as tk
  0
                                                            from tkinter import messagebox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The state of the s
  go
                                                           from sudokus import puzzleseasy, puzzlesmedium, puzzleshard
                                                            class Sudoku:
$
                                                                            def __init__(self, master):
    self.master = master
    self.master.title("Davud's Sudoku") # sets the title of the window
8
                                                                                              self.master.geometry("600x700")
self.master.configure(bg="#f0f0f0")
  A
                                                                                              self.board = [[0 for _ in range(9)] for _ in range(9)] # creates a 9x9 empty sudoku board
                                      12
                                                                                              self.difficulty = tk.StringVar() # holds the difficulty level
                                      15
                                                                                              self.difficulty.set("Easy") # sets default difficulty to easy
                                      16
17
                                                                                               self.widgets() # add widgets fuction
                                      18
                                                                                               self.generate_board() # adds generate_board function
                                     19
                                                                            def widgets(self):
                                      21
22
                                                                                              menu = tk.Menu(self.master) # creates a menu bar self.master.config(menu=menu) # ensures that the menu bar is attached to the main window.
                                     23
24
25
                                                                                             difficulty_menu = tk.Menu(menu, tearoff=0) # creates a dropdown menu for difficulty levels
menu.add_cascade(label="Difficulty", menu=difficulty_menu) # adds the dropdown menu to the menu bar
difficulty_menu.add_radiobutton(label="Easy", variable=self.difficulty, value="Easy", command=self.generate_board) # easy difficul
difficulty_menu.add_radiobutton(label="Medium", variable=self.difficulty, value="Hard", command=self.generate_board) # medium di
difficulty_menu.add_radiobutton(label="Hard", variable=self.difficulty, value="Hard", command=self.generate_board) # hard difficulty
                                     26
                                     27
28
                                     29
30
                                                                                               grid_frame = tk.Frame(self.master, bg="#000000", bd=2) # frame - border
                                      31
                                                                                               grid_frame.pack(pady=20)
                                                                                               self.entries = [[None for _ in range(9)] for _ in range(9)] # creates 9x9 matrix to store widgets
8
                                                                                               for box_row in range(3):
                                      34
                                                                                                                 sub_grid = tk.Frame(grid_frame, bg="#900000", bd=1) # border for 3x3 grids
                                      35
  8
                                                                                                                                                                                                                                                                                                                                       × ⊗ o ∆ o ₩ o
```

The game should appear in your screen:



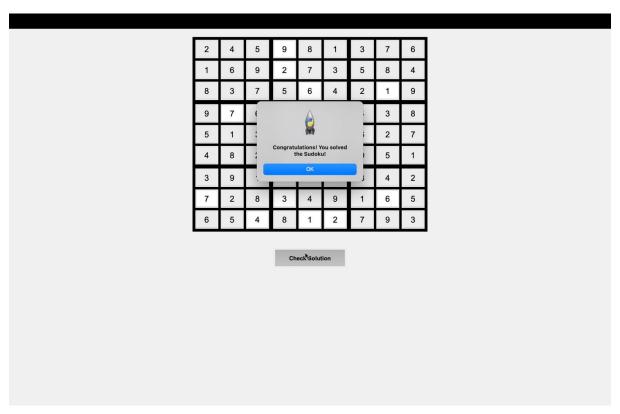
You can make it full screen if you'd like to and adjust the difficulty level from the menu:



How to play?

In sudoku you must fill the empty spaces with numbers, such that, no number should appear twice in a row, in a column or in the smaller 3x3 grids.

After completing the sudoku, you can use the 'Check Solution' button to see whether you correctly completed the sudoku or not and see a message accordingly:



That is all the information needed to enjoy this beautiful game of sudoku.

Have a great time!