

## **The Shell      (futurecoder.io)**

- Introducing The Shell
- Navigating Shell History

## **String Basics**

- Introducing Strings
- Adding Strings

## **Variables**

- Introducing Variables
- Using Variables and print()
- Storing Calculations In Variables

## **For Loops**

- Introducing For Loops
- Indentation
- Basic For Loop Exercises
- Building Up Strings
- Building Up Strings Exercises
- Basic Terminology

## **If Statements**

- Introducing If Statements
- Combining Compound Statements
- Understanding Programs With snoop
- if and else
- The Equality Operator
- Introducing elif
- Other Comparison Operators

## **Lists**

- Introducing Lists
- Building New Lists
- Using break to end a loop early
- Getting elements at a position, range(), and len()
- Exercises with range() and len()
- Terminology: Calling functions and methods
- Functions and Methods for Lists
- More List Functions and Methods
- String Methods and Immutability
- How to Find Information with Google, and more
- Understanding Programs With Python Tutor

- == vs is, and Having Multiple Names for One Value
- Modifying While Iterating
- A Bit More About Strings
- Single and Double Quotes in Strings (current)
- f-strings

## **Nested Loops**

- Introducing Nested Loops
- Understanding Programs with birdseye
- Introducing Nested Lists
- Looping Over Nested Lists

## **Functions**

- Defining Functions
- Calling Functions Within Functions
- Returning Values From Functions
- Testing Functions
- return ends the function call

## **Boolean Operators**

- Introducing or
- Introducing and
- Multi-line statements
- Combining and and or
- Introducing not

## **Tic Tac Toe Project**

- Checking the board for winners
- The newline character, format\_board
- Types
- Interactive Programs with input()
- Nested List Assignment: Playing Moves on the Board
- Making the Board
- The Full Tic-Tac-Toe Game

## **Dictionaries**

- Introducing Dictionaries
- Using Dictionaries in Practice
- Iterating over Dictionary Keys
- Creating Key-Value Pairs
- format it