

2021

LOCKHEED MARTIN

CODEQUEST GAMEPLAN

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# **Mission 01**

1. Introduction
2. Installing Python and PyCharm

\*\* @ 6:41 Quick heads up that your app might already be set to darcula theme on default.

* + You can check by clicking on **customize.**
  + Go to previously configured interpreter 🡪 python 3.9

1. Setup and Hello World

https://www.youtube.com/watch?v=rfscVS0vtbw&t=498s

# **Mission 02**

1. Drawing a Shape
2. Variables and Data Types
3. Working with Strings
4. Working with numbers

Python exercise of the day: create a program that prints your favorite ice cream flavor.

Example:

(save file as Mission\_02\_exercise)

# **Mission 03**

1. Getting input from users
2. Building a basic calculator
3. Mad Libs

Python exercise of the day: create a program that takes user input and multiplies 4 numbers together.

*Hint: Just like how you would use str() to store user input as a string, you use int() to store user input as an integer.*

(save file as Mission\_03\_exercise)

# **Mission 04**

1. Lists
2. List functions
3. Tuples
4. Functions
5. Return Statement

Python exercise of the day: create a program that displays a list of the classes you are taking.

(save file as Mission\_04\_exercise)

# **Mission 05**

1. If Statements
2. If statements and comparisons
3. Building a better calculator

Python exercise of the day: Create a program that checks if is\_female and is\_athlete is true and display the following messages depending on the conditions:

* You are a female and an athlete.
* You are a female but not an athlete.
* You are not a female but is an athlete.
* You are neither a female nor an athlete.

(save file as Mission\_05\_exercise)

# **Mission 06**

1. Dictionaries
2. While loops
3. Building a Guessing Game
4. For Loops

Python exercise of the day: Pick 5 abbreviations and make a dictionary for it.

(save file as Mission\_06\_exercise)

# **Mission 07**

1. Exponent and Functions
2. 2D list and nested loops
3. Building a translator

Python exercise of the day: Create a program that converts user input to be all uppercase

Hint: refer to what you learnt from “Variables with Strings”

# **Mission 08**

1. Comments
2. Try/except
3. Reading Files
4. Writing Files

# **Mission 09**

1. Modules and Pip
2. Classes and Objects
3. Building a Multiple-Choice Quiz

# **Mission 10**

1. Object Functions
2. Inheritance
3. Python Interpreter

File names:

Make a folder on your desktop and name it **Python Files**

(This will be where you save all your python files)

# **Missions Overview**

01\_Hello\_World

02\_Drawing\_A\_Shape

03\_Variables\_And\_Data\_Types

04\_Working\_With\_Strings

05\_Working\_With\_Numbers

06\_Getting\_Input\_From\_User

07\_Building\_A\_Basic\_Calculator

08\_Mad\_Libs\_Game

09\_Lists

10\_List\_Functions

11\_Tuples

12\_Functions

13\_Return\_Statement

14\_If\_Statements

15\_If\_Statements\_And\_Comparisons

16\_Building\_A\_Better\_Calculator

17\_Dictionaries

18\_While\_Loops

19\_Building\_A\_Guessing\_Game

20\_For\_Loops

21\_Exponent\_Function

22\_2D\_Lists\_And\_Nested\_Loops

23\_Building\_A\_Translator

24\_Comments

25\_Try\_Except

26\_Reading\_Files

27\_Writing\_to\_Files

28\_Modules\_and\_Pip

29\_Classes\_And\_Objects

30\_Building\_A\_Multiple\_Choice\_Quiz

31\_Object\_Functions

32\_Inheritance

33\_Python\_Interpreter

# **Creating A GitHub Account**

1. Go to github.com
2. Make an account using your personal email (I say this because it allows you to keep it for your portfolio.)
3. Create a repository and call it Bayshore Code Quest
4. Under quick setup, click on upload an existing file
5. Upload your hello-world file. From now on, all your files should be uploaded here after you save it onto your computer.