2021
LOCKHEED MARTIN
CODEQUEST GAMEPLAN

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Mission 01
   I.   Introduction
   II. Installing Python and PyCharm

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

   o   You can check by clicking on **customize.**
   o   Go to previously configured interpreter → python 3.9
   III. Setup and Hello World

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

Mission 02
   I.   Drawing a Shape
   II. Variables and Data Types
   III. Working with Strings
   IV. 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
   I.   Getting input from users
   II. Building a basic calculator
   III. 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
   I.   Lists
   II. List functions
   III. Tuples
   IV. Functions
   V.   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
   I.   If Statements

II.   If statements and comparisons
III.   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:

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

(save file as Mission_05_exercise)

Mission 06
I.   Dictionaries
II.   While loops
III.   Building a Guessing Game
IV.   For Loops

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

(save file as Mission_06_exercise)

Mission 07
I.   Exponent and Functions
II.   2D list and nested loops
III.   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
I.   Comments
II.   Try/except
III.   Reading Files
IV.   Writing Files

Mission 09
I.   Modules and Pip
II.   Classes and Objects
III.   Building a Multiple-Choice Quiz

Mission 10
I.   Object Functions
II.   Inheritance

III.   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.