

Lesson 1: Week 2 - Overview

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Week 2 Tuesday To Do List

Week 2 Tuesday To Do List Admin/Tips Quiz 1 worth 4 marks will be released Week 2 Thursday and due Week 3 Thursday 9pm (you will have one week to do it) Week 3 Monday is a public holiday. Students missing Week 3 Monday tutorial are strongly advised to attend one of the four online tutorials in Week 3 to catch up on the missed Week 3 Monday tutorial. Content Continue showing how to run Turing machine simulator Importing modules slide revisited (added extra examples) Continue "Week 1 - Python Programming Fundamentals" with "Controlling program flow" slide if statements, body/block, indentation, elif, and match while statements, continue, and break Exceptions, try, except, and else Working with files, open(), close(), with(), Show the flowchart - problem solving from requirements, example.py rewritten using match statement Go through "Week 2 - Lists, Tuples, Sets, and Dictionaries"

Week 2 Thursday To Do List

Week 2 Thursday To Do List Admin/Tips Quiz 1 worth 4 marks will be released today @ 7.15pm Online Tutorials recordings in BB Collaborate Plagiarism and Academic Integrity Reminder (see today's announcement on Ed) Assignment 1 worth 13 marks will be released Week 3 Tuesday Content Start "Week 2 - Lists, Tuples, Sets, and Dictionaries" lesson Collections Creating a collection Inspecting a collection Selecting elements Looping through a collection for loops break and continue The range() function Adding elements Adding to a list: append(), insert(), extend(), and using + operator No adding to tuples since they are immutable Adding to a set: add() and update() Adding to a dictionary by specifying a value for a new key or updating it Removing elements Removing from a list: del, set slice to empty list, pop(), remove(), and clear() No removing from tuples since they are immutable Removing from a set: remove(), discard(), and clear() Removing from a dictionary: del, pop(), and clear() Modifying elements Modifying list elements: assignment and slice No tuples modification since they are immutable Modifying set elements: can not be changed, but remove then add Modifying dictionary elements: using assignment similarly to list elements Sorting elements sort() method (lists only and in-place) sorted() method (applies to all and returns a list) Joining elements using join() Special string operations Strings as tuples Splitting strings Special set operations: union, intersection, difference, symmetric difference, comparing sets Comprehensions Files as lists: readlines(), writelines(), reading CSV files Dates and times Useful Links ASCII Table <https://www.ascii-code.com/> Python List sort() Method <https://www.programiz.com/python-programming/methods/list/sort> Python sorted() Method <https://www.programiz.com/python-programming/methods/built-in/sorted>