Lesson 2a worksheets

1. List

* Use to hold a list of items

A screenshot of a computer

AI-generated content may be incorrect.

1. Length of list

* Use len() function to get the number of items in a list

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AI-generated content may be incorrect.

1. Accessing a list

* Use index to access each item in a list
* Each item in the list has an index, starting from 0.
* The last item in the list will have an index of length of list – 1.

A close-up of a number

AI-generated content may be incorrect.

* Use negative index to access each item in a list

A close-up of a number

AI-generated content may be incorrect.

1. Update item in list

* Using index to change the item.

A math equations and formulas

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1. Append

* Use append() to add in new item at the end of the list

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AI-generated content may be incorrect.

1. Insert

* Use insert() to add in new item with the required index

A close-up of a computer code

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1. Extend

* Use extend() to add in a list to another list

A close-up of words

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1. Add two lists
   * Similar to extend, except we use the “+” operator

A close-up of words

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1. Multiple a list

* Repeat the list for many times

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1. Delete

* Use del to remove an item using index

A group of black squares with green and purple text

AI-generated content may be incorrect.

1. Remove

* Use remove() to remove an item

A close-up of a text

AI-generated content may be incorrect.

1. Count

* Use count() to get the number of required item in a list

A group of text with purple text

AI-generated content may be incorrect.

1. Sort

* User sort() to sort a list in alphabetical order.

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1. Reverse

* Use reverse() to reverse a list

A group of different names

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1. Number list operation
   * Use min and max to get the highest and lowest number in a number list

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AI-generated content may be incorrect.

* Use the statistics package for basic statistical computation
* https://docs.python.org/3/library/statistics.html

A close-up of a number

AI-generated content may be incorrect.

1. List slicing

* List can be sliced using the start and stop index with step.

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1. Range

* Use range to generate a list of number in certain pattern

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A screenshot of a computer code

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1. For loop
   * Use for loop to repeat a segment of codes many times

A number and emoticons with different colored numbers

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* Use for loop to get each item from a list one by one

A close-up of a text

AI-generated content may be incorrect.

* Use for loop with range and len to access each item in the list

A computer code with many different colored text

AI-generated content may be incorrect.

* Use for loop with three parallel list

A screenshot of a computer code

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* Use for loop to update the item value.
* In this follow case, each price is incremented by 10%

A computer code with text

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1. Two-dimensional list

* Put many lists within a list.

