Lab 10 – 20 pts

1) Take a screenshot of the outputs AND the python script of the exercise and name the files as "yourname_cs110_lab10" and submit to Canvas.
2) Save the editor/python file as yourname_cs110_lab10.py and submit it to Canvas.
    a. Make sure to save it with the .py extension.

[10 pts] Task 1

1. [3 pts] Create a list called number_list with numbers from 1 to 20 using range.
    a. if the student manually typed from 1 to 20 [-2]
    b. if the student typed either range(0,20) or range(1,20) [-1.5]
2. [6 pts] Remove every 3rd element in number_list, starting from the first element (e.g., indices 2, 5, 8, etc.). HINT: Use slicing and element removal taught in class
    a. Accept if students used for-loop.
3. [1 pt] Print number_list to display the final result.

For example:

Initial list: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20]

After removing every 3rd element: [1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20]

[10 pts] Task 2

1. [3 pts]Create Two Shopping Lists

Define two lists, grocery and electronic, with 5 items each. You can choose any items you'd like to include, but make them interesting (e.g., "oranges" for groceries, "headphones" for electronics). Then, sort each list. Print the lists before and after the sorting.

grocery = [g_1, g_2, g_3, g_4, g_5]
electronic = [e_1, e_2, e_3, e_4, e_5]

- Accept if: students did not print out the sort. If the lists were not sorted [-1.5]

2. [7 pts] Create a table: Create an empty table, shopping_table.
shopping_table = [[], []]

Using a for-loop, collect the first two items from the grocery list into the table. Use a similar method to insert the last two items from the electronics list into the table. The row of the table represents the shopping category, and the column represents the items. Print the table.

shopping_table = [[g_1, g_2],[e_5, e_4]]

- Accept: for electronics, students needed to have e_5 and e_4 in the order. Otherwise, [-2]