

HW4: Lists, Debugging

Due October 4, 2023

1 Debugging

Throughout this homework, whenever you encounter an error, we would like you to explain in a comment what it was and how you fixed it. You can write all these errors at any place in the file.

2 List slicing and striding

2.1 Part 1

Create a variable (name it anything you want but make it descriptive!) that is assigned to a list with the numbers 0 to 50. You should not have to write each number manually.

2.2 Part 2

Create a function that takes in a list and squares each element in the list.

2.3 Part 3

You are given two lists: listA and listB. listA contains the integers 1 through 10 while listB contains the integers 20 through 30. Return a single, new list containing only the odd integers of both lists in sorted order.

3 2D Lists

3.1 Part 1

Using nested for loops, create and print a 5x5 2D array with the odd numbers from 1 to 25.

3.2 Part 2

Now with your completed 2D list, replace all multiples of 3 with '?' character and print the resulting list.

4 More list practice

Write a function that takes in a list and returns a copy of that list with duplicate values removed.