Lesson 5 Assignment

Laura Bartlett

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Source Code:

#Lesson 5 Assignment

#Grade Calculator

#create grades list

grades=[]

#function to get user input and add input to grades list

#included "-1 to stop" for when the user is done entering grades

def get\_grades():

    while True:

        user\_grade = int(input("Enter grade now, enter -1 to stop:    "))

        if user\_grade != -1:

            grades.append(user\_grade)

        else:

            break

    print("You grades are:")

    print(grades)

#function to drop the lowest grade

def drop\_low():

    print()

    print("Removing lowest grade.")

    print()

    if grades:

        lowest= min(grades)

        lowest\_index= grades.index(lowest)

        grades.pop(lowest\_index)

    print("Your grades are:")

    print (grades)

#function to drop one random grade

def drop\_rand():

    import random

    print()

    print("Removing random grade.")

    print()

    random\_grade = random.choice(grades)

    grades.remove(random\_grade)

    print("Your grades are:")

    print(grades)

#funtion to allow user to edit grade values

#I added "-1 to finish" for when the user is done editing

#or if they want to skip editing. Used "if to\_edit == -2" becuase

#it will not work with -1 because counting is starting at 0

def edit():

    print()

    print("Edit a grade:")

    print()

    for index, item in enumerate(grades, start=1):

        print(f"{index} . {item}")

        print()

    while True:

        to\_edit = int(input("Choose which grade to edit or -1 to finish: ")) - 1

        if to\_edit == -2:

            break

        if 0 <= to\_edit < len(grades):

            edited = int(input("Enter new grade: "))

            grades[to\_edit] = edited

        else:

            print("Error: please enter a value that corresponds to a grade.")

            print()

    print()

    print("Your grades are: ")

    print(grades)

#function to sort then reverse the list

def sort\_rev():

    print()

    print("Sorting and reversing grades...")

    print()

    grades.sort()

    grades.reverse()

    print(grades)

#function to calculate and print list total, then calculate and print list average

def tot\_avg():

    print()

    print("Calculating total and average...")

    print()

    total = sum(grades)

    print("Total: ")

    print(total)

    avg = total / len(grades)

    print()

    print("Average: ")

    print(int(avg))

# Defined main() and ran all my functions within main,

# included "hello" and "goodbye" print statements

def main():

    print()

    print("Welcome to The Grade Calculator")

    print()

    get\_grades()

    drop\_low()

    drop\_rand()

    edit()

    sort\_rev()

    tot\_avg()

    print()

    print("Thank you for using The Grade Calculator!")

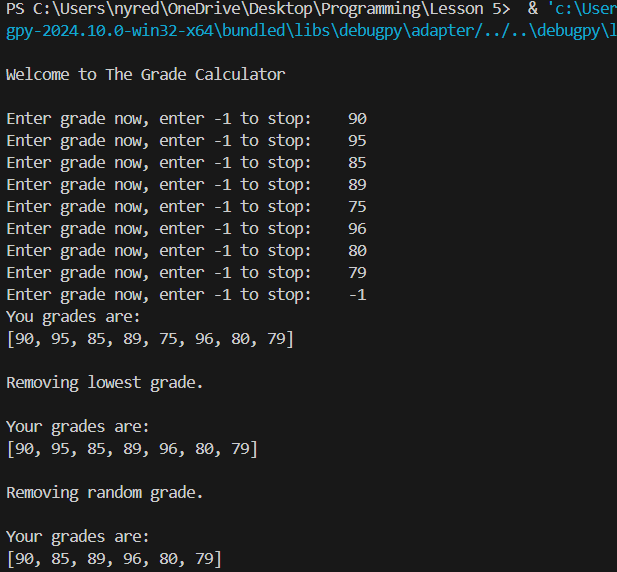
    print()

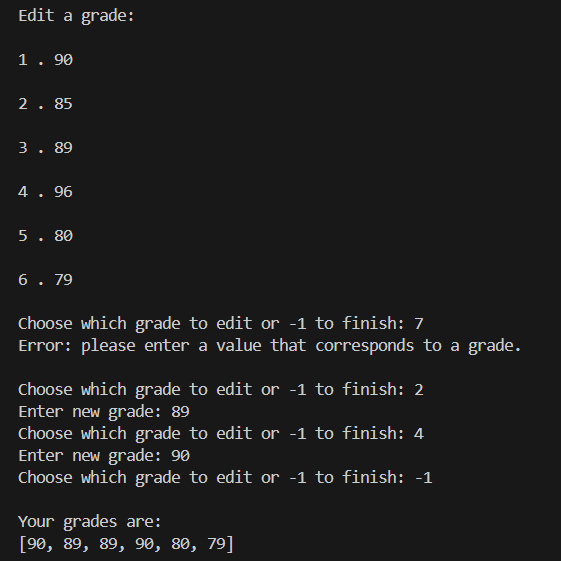
main()

print("Completed by Laura Bartlett")

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Screenshots:





A screenshot of a computer program

Description automatically generated