import random

def main():

    #Create list for grades

    grades = []

    #get input from user to enter grades. -1 to leave loop

    while True:

        grade = input("Enter a grade (or -1 to finish): ")

        if grade == "-1":

            break

        else:

            try:

                grade = int(grade)

                grades.append(grade)

            except:

                print("Invalid input. Please enter a number.")

    #just printing the grades

    print("\nGrades List:", grades)

    #removing the lowest grade

    if len(grades) > 0:

        lowest\_grade = min(grades)

        grades.remove(lowest\_grade)

        print("\nGrades List after removing the lowest grade:", grades)

        #removing a random grade and displaying it.

        random\_grade = random.choice(grades)

        grades.remove(random\_grade)

        print("\nGrades List after removing a random grade:", grades)

        print("\nThe grade that was removed was", random\_grade)

    #pick a grade to edit.

    if len(grades) > 0:

        print("\nEditing a grade:")

        for i in range(len(grades)):

            print(i + 1, ":", grades[i])

        while True:

            edit\_index = input("Which grade would you like to edit (1-{}): ".format(len(grades)))

            try:

                edit\_index = int(edit\_index) - 1

                if 0 <= edit\_index < len(grades):

                    new\_grade = input("Enter the new grade: ")

                    new\_grade = int(new\_grade)

                    grades[edit\_index] = new\_grade

                    break

                else:

                    print("Invalid index. Please try again.")

            except:

                print("Invalid input. Please enter a number.")

    print("\nGrades List after editing:", grades)

    #grades sorted and reversed.

    if len(grades) > 0:

        grades.sort()

        grades.reverse()

        print("\nGrades List after sorting and reversing:", grades)

    #calculate total and average of remaining grades.

    if len(grades) > 0:

        total = sum(grades)

        average = total / len(grades)

        print("\nTotal of grades:", total)

        print("Average of grades:", average)

    print("\nCompleted by, TJ Waldie")

if \_\_name\_\_ == "\_\_main\_\_":

    main()

