# Worksheet 6 Sorting lists

**Task 1**

1. Complete this program to put the list of names in alphabetical order.

oneD = ["Niall","Zayn","Liam","Harry","Louis"]  
print(inOrder)

1. Alter the program so that it will print the names in reverse alphabetical order (Z to A).

1. Write a program that will ask for six numbers and will then print those numbers in   
   ascending order.
2. Alter the program so that it will print the numbers in descending order.
3. Complete this program so that the user can select whether to print the names in ascending (A-Z) or descending (Z-A) order.

actorsWhoPlayedBatman = ["Adam","Michael","Val","Christian"]

**Task 2 Other functions**

**Functions and methods you may (or may not) need:**

values = [17,12,5,9,16,23,4,31,13]

sortedValues = sorted(values)

sortedValues = sorted(values,reverse=True)

size = len(values) # Find size of list

largest = max(values)

smallest = min(values)

total = sum(values) # Add up all values

values = [] # sets up an empty list

del values[n] # deletes the values[n] from the list and reduces the length of the list by 1

values.append(weight) #appends the value of weight to the end of the list

6. Write a program which allows a user to enter several parcel weights in grams and appends each weight to a list. Data entry stops when the user enters 0 for a parcel weight.

The list is then sorted into ascending sequence and the maximum and minimum weight deleted from the list. The number of items remaining in the list is printed.

The average of these items is calculated and printed out.

**Extension**

7. (Challenging!) A game program keeps a list of the top five scores that a player has achieved in this session of repeatedly playing the game. The top five scores are held in descending order in a list called highScores.

When the program starts, the list contains all zeroes. To test the scorekeeping, write a program which allows the user to put in his or her latest score.

The program checks whether this is greater than the minimum value in the highScores list and if it is, prints a “Well done” message and replaces the minimum value with the latest score. The list is then resorted into descending sequence and printed out. If the latest score is less than the minimum, the list is simply printed out with a suitable message.

Complete the program below:

highScores =[0,0,0,0,0]

print ("This program allows you to put in your score for a game, ")

print ("which you can play any number of times ")

print ("It keeps the best 5 scores and prints them each time")

print ("there's no actual game in this program, it just tests the \ scoring")

anotherGo = 'y'

while anotherGo == 'y':

newScore = int(input("Enter your latest score: "))