



Problems

1. Create a simple 68K program called ADDER. Your program should add together the numbers 6, 4, 12, 16, 17, and 50. You **must** use Relative addressing, for more information about relative addressing please refer to section 6.4.3 in the textbook.
2. Deleting multiple spaces from a string, e.g "The test " should be "The test". You have to handle the case where spaces are before the end of the string.
3. Write a program to arrange a sequence of eight numbers in descending order. You can store the numbers in memory before the program is executed by means of the DC.B assembler directive. For example

List DC.B 1,2,5,4,8,5,4,2

There are many ways of performing this sorting operation. One of the simplest is to search the list for the largest number and put it at the top of the list, then do the same to the remaining numbers, and so on

Instructions

- You have to download and install [Easy68k](#). EASy68K is a 68000 Structured Assembly Language IDE. EASy68K allows you to edit, assemble and run 68000 programs on a Windows PC or Wine if you are running Ubuntu.
- For more information about Easy68K please refer to section 6.1.2 Using the cross-assembler in the textbook.
- You are required to submit your code and screenshots of the simulation. Put all files in a zip file and submit it in the form
- You **must** write a comment on each line describing what it does.