# Lab 1.C – Copy Program

The first assignment is a simple copy program. That is, you are to duplicate the code that is supplied on the last page of this assignment. The goal here is to have you interact with the EASy68K Assembler to create data in memory and execute a small program.

## PROCEDURE

1. Assign the string **‘ABCDEFGHIJKLMNOPWRSTUVWXYZ’** to memory location 2000
2. Assign the string **‘abcdefghijklmnopwrstuvwxyz’** to memory location 2000
3. Assign the string **‘0123456789’** to memory location 2000
4. Enter the code provided in the START section of the editor
5. Assemble the source code using the play button or F9
6. When the simulator opens, click the run button or F9
7. Bring up the memory window and scroll to address location 2200 to see the string printed

## SOURCE CODE

1. ORG $2000
2. DC.L 'ABCDEFGHIJKLMNOPQRSTUVWXYZ'
3. ORG $2020
4. DC.L 'abcdefghijklmnopqrstuvwxyz'
5. ORG $2040
6. DC.W '0123456789'
8. START:
9. LEA.L $002000,A2
10. LEA.L $002020,A3
11. LEA.L $002040,A4
12. LEA.L $002200,A1
13. MOVE.B $002016,(A1)+
14. MOVE.B $002024,(A1)+
15. MOVE.B $00202B,(A1)+
16. MOVE.B $002022,(A1)+
17. MOVE.B $00202E,(A1)+
18. MOVE.B $00202C,(A1)+
19. MOVE.B $002024,(A1)+
20. MOVE.B #32,(A1)+
21. MOVE.B 19(A3) ,(A1)+
22. MOVE.B 14(A3) ,(A1)+
23. MOVE.B #32,(A1)+
24. MOVE.B 2(A2) ,(A1)+
25. MOVE.B 18(A2) ,(A1)+
26. MOVE.B 2(A2) ,(A1)+
27. MOVE.B 8(A2) ,(A1)+
28. MOVE.B #32,(A1)+
29. MOVE.B 3(A4) ,(A1)+
30. MOVE.B 2(A4) ,(A1)+
31. MOVE.B (A4) ,(A1)+
32. MOVE.B #33,(A1)+
33. MOVE.B #33,(A1)+
34. MOVE.B #33,(A1)+
35. MOVE.B #32,(A1)+
37. SIMHALT ; halt simulator
38. END START ; last line of source