4.2.4 EXERCISE 4.1

1. What is the total SSE when training ends?

2. Describe the appearance of the graph of SSE as a function of training epoch.

3. What can be said about these errors?

4. What is the relationship between the set of connection weights, and the input and output patterns whose associations are stored in the weights? (To answer this question, remember you can take a look at the set of input patterns and the set of output patterns, because this information is stored in the spreadsheet as well.)

EXERCISE 4.2

1. What is the total SSE when training ends?

2. How does this compare to the total SSE from Exercise 4.1?

3. Describe the appearance of the graph of SSE as a function of training epoch.

4. How does this appearance compare to the graph that was obtained in Exercise 4.1?

5. What can be said about network errors, and how does this relate to what was found in Exercise 4.1?

6. Examine the connection weights that resulted from this training. How do they relate to the weights that were observed in Exercise 4.1?

7. If one were to examine the connection weights of this network in an attempt to determine how the memory stored its knowledge, would this be a straightforward task to accomplish? If not, then speculate on what approach one might be forced to take to interpret the internal structure of this kind of network.