

## A note on working with lists of strings

All the strings on which the program has to work can be put in a common area in a compact manner and all lists of strings can be organised as arrays of pointer to these strings. This is illustrated in the figure below. There are four null terminated strings ("one", "two", "three" and "four") stored at address List\_data onwards, one after another. A four element pointer array is stored at address List\_pointers\_1 onwards. Contents of this array are -

<List\_data, List\_data+4, List\_data+8, List\_data+14>

This array represents the following list.

<"one", "two", "three", "four">

The second four element pointer array stored at address List\_pointers\_2 onwards represents another list formed out of the same 4 strings, but in a different order. Contents of this array are -

<List\_data+14, List\_data, List\_data+8, List\_data+4>

The list represented by this array is as follows.

<"four", "one", "three", "two">

