1. What is the difference between parallel arrays and multidimensional arrays?

A parallel array is a one-dimensional array where element of the array represents a variable. A multidimensional array can be in two three or more dimensions. They differ also in the fact that a multidimensional array uses two or more subscripts to identify a particular object.

1. When you declare an array, are you also giving it a value?

Declaring an array does not mean you give it a value. Some languages do it automatically, but you should not rely on that.

1. What are the advantages and disadvantages of sequential search?

The disadvantage of sequential search is that it is not efficient. It has a big O notation of O(N). The advantage of a sequential search is that it is pretty basic and intuitive to what it is doing, you are basically compering every element in a list. Sequential searches also do not need to be sorted.