File, Record, Field Cards

Questions/activities

1. Look at the cards and arrange them in a logical order.

2. A record gives you all the information about one particular item in the data table. Give an example of a possible record.

   This is an example of a flat file database, a single table

3. A field contains a single piece of information, it is the smallest unit of information that you can access in a database. What fields are there?

4. Which field uses codes? What are they?

5. What are the advantages of using codes?

6. Can you think of any disadvantages of using codes?

7. Could two people have the same first name? Is that likely?

8. Could two people have the same surname? When might that happen?

9. Every data table needs a key field, something that uniquely identifies each record, separating it from the others. What could be used as the key field in this data table?

10. Could two people have the same date of birth? Is that likely? When might it happen?

11. It is likely that two or more people will share the same surname, especially if it is a common surname like SMITH. It is quite possible that two people could have the same first name AND surname. It is usual to add another field so that we can tell these people apart. What do you think that field would be?

12. How might you want to sort this data table? Why?

13. Take the surnames and sort them in ascending alphabetical order.

    a. Serial search for "XXXX". On average, how may comparisons will be needed?

    b. Binary search for the same.