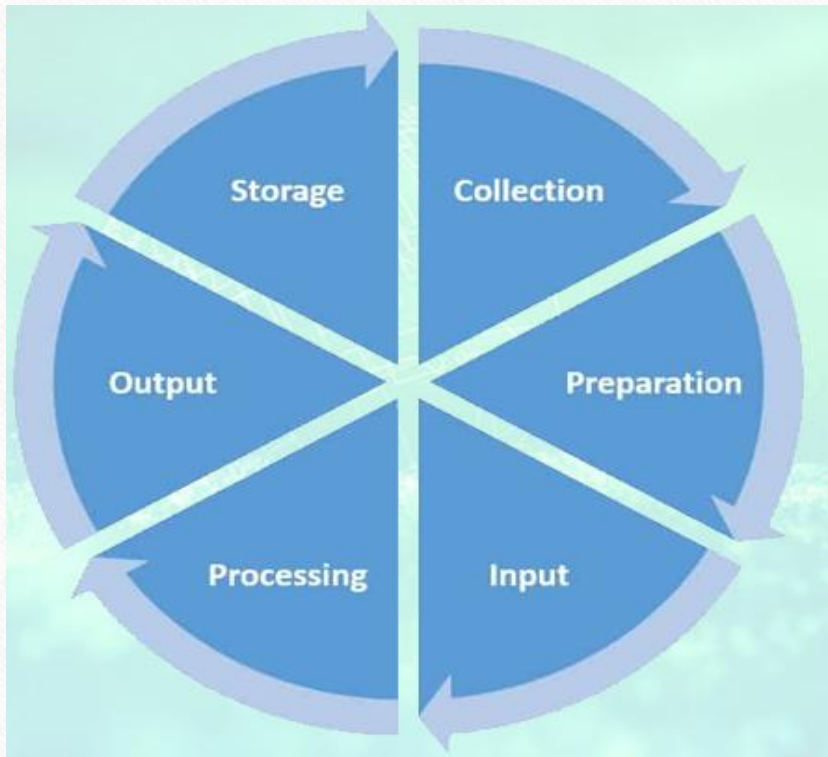# Data processing

Aims

- Here the focus is on describing the stages in data processing: data collection (gathering raw data to process), data coding (arranging and systematising data), data validation (double-checking and cleaning data) data entry (entering data into a system), data tabulation (arranging data into table format for analysis) and data sorting (creating categories in order to organise data into groups).

Data processing

Data processing is, generally, "the collection and manipulation of items of data to produce meaningful information".

The term Data Processing (DP) has also been used to refer to a department within an organization responsible for the operation of data processing applications.

Stages of Data Processing

Data processing is divided into 6 stages, and we receive the output in the final stage. These stages are:
Collection of data
Storage of data
Data Sorting
Data Processing
Data Analysis
Presentation and Conclusions

Data processing

1 Match the headings in the box to the data processing steps a–f.

> data coding   data collection   data entry   data sorting
> data tabulation   data validation

a _____ Gather the raw data which you want to process. `1`

b _____ Arrange and systemise the data. ☐

c _____ Clean the data and double-check for faults and inconsistencies. ☐

d _____ Enter the data into a system. ☐

e _____ Arrange the data into table format so that it can be analysed. ☐

f _____ Create categories to organise the data into relevant groups. ☐

2 Put the data processing steps in 1 into the correct order.

Vocabulary **6** Complete these sentences with the words in the box.

about	at	between	for	from	in	into	of	~~to~~

Example: This database is used to store our financial information.

1 What's the difference _____ a database and a spreadsheet?
2 A database is _____ storing data.
3 The school has information _____ students.
4 Can people access the system _____ the same time?
5 A database is a collection _____ records.
6 You retrieve information _____ the database.
7 You enter the data _____ the system.
8 Which software do you use _____ your work?

Glossary

Unit 4 Databases
Data processing / Data storage and back-up

Word	🇬🇧	🇺🇸	Definition	Translation
arrange (v)	🔊	🔊	to put things in a particular order or pattern	
data coding (v phr)	🔊	🔊	cleaning data and double-checking for faults and inconsistencies	
data collection (v phr)	🔊	🔊	gathering raw data which you want to process	
data entry (v phr)	🔊	🔊	typing data into a database using a keyboard; entering data into a system	
data sorting (v phr)	🔊	🔊	the process of electronically sorting data; arranging and systemising data	
data tabulation (v phr)	🔊	🔊	creating categories to organise data into relevant groups	
data validation (v phr)	🔊	🔊	arranging data into table format so that it can be analysed	
format (n)	🔊	🔊	the way in which something is organised or designed	
record (n)	🔊	🔊	information that you write down and keep so that you can look at it later	
remote (adj)	🔊	🔊	far away	
spreadsheet (n)	🔊	🔊	a computer program that you use for showing and calculating lists of numbers	
table (n)	🔊	🔊	a set of numbers or facts that are arranged in rows	

Language

Quick questions to check understanding

We use these when we are making sure the other person understands the statement.	That's called collection. **OK**?
	That's coding? **Got that**?
	That's tabulation. **All right**?
	We call that sorting. **Understood**?

Speaking

7 Work in pairs. Explain the data processing steps from 1 in your own words.

8 Look at the examples of database software below. What database software do you know? What is it used for?