

Computing

# Lesson 2: Computer Databases

## Flat-file Databases

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# Task 1 - Sorting to answer questions

1. Open the mini beasts database from: [oaknat.uk/comp-d52-1](http://oaknat.uk/comp-d52-1)
2. Click in the table tab
3. Click on the column headings to sort the data from highest to lowest. Click a heading again to sort the data from lowest to highest.
4. Sort the data to help you answer the questions on the next page.

2 viewers

search

sort by [entered]

record 1 of 13

Mini Beast

Bumble bee

Picture

How many legs 6

Does it have wings ☒

Does it have a shell ☐

Source: J2E

2 viewers

search

record 1 to 13 of 13

Mini Beast	Picture	How many legs	Does it have wings	Does it have a shell
Bumble bee		6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ant		6	<input type="checkbox"/>	<input type="checkbox"/>
Butterfly		6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
fly		6	<input type="checkbox"/>	<input type="checkbox"/>
Dragon fly		6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fly		6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grasshopper		6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ladybird		6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



# Task 1 - Sorting to answer questions

- Which mini beast has the most legs?
- Which mini beasts have the fewest legs?
- Which mini beast is at the beginning of the alphabet?
- Which mini beast is at the end of the alphabet?

defineformtablechartoptions

2 viewerssearchrecord 1 to 13 of 13

Mini Beast	Picture	How many legs	Does it have wings	Does it have a shell
Bumble bee		6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ant		6	<input type="checkbox"/>	<input type="checkbox"/>
Butterfly		6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
fly		6	<input type="checkbox"/>	<input type="checkbox"/>
Dragon fly		6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fly		6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grasshopper		6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ladybird		6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Source: J2E



# Task 2 - Sorting in different views

- 1. Open the countries database:
- 2. [oaknat.uk/comp-d52-2](http://oaknat.uk/comp-d52-2)
- 3. Choose a view and sort the data to answer the questions on the next page.
- 4. Think of two more questions you could answer by sorting the data.

search

sort by Area

record 19 of 24

Country Name

United Kingdom

Area

242,495

km^2


Population

64100000

Language

English

Flag



Currency

Great British Pounds

Source: J2E

search

record 1 to 20 of 24



# Task 2 - Sorting in different views

Write down answers to the questions below. Also note which field you used to answer each question.

- 1. Which country has the smallest population?
- 2. Which country covers the largest land area?
- 3. Which currency is last alphabetically?

Think of two more questions you could answer by sorting the data.

search

sort by Area

record 19 of 24

Country Name

United Kingdom

Area

242,495

km^2


Population

64100000

Language

English

Flag



Currency

Great British Pounds

Source: J2E

search

record 1 to 20 of 24



# Task 3 - Records and fields

Look at these two database views and identify which parts are records and which parts are fields.

search

sort by 

Area

←

→

record 19 of 24

Country Name

United Kingdom

Area

242,495

km^2

Population

64100000

Language

English

Flag








Currency

Great British Pounds

search

record 1 to 20 of 24

Country Name	Area (km^2) ↓	Population	Language	Flag	Currency	
Russia	17,098,242	144192448	Russian		Russian ruble	
Canada	9,980,000	35985752	English/French		Canadian Dollar	
United States	9,857,306	322369312	English		United States Dollar	
China	9,596,961	1376049024	Chinese		Renminbi	
Brazil	8,515,767	205338000	Portuguese		Real	

Can you think of another field that could be added to this database?

Source: J2E



# Task 4 - Compare paper vs computer

Think of advantages and limitations.

☒

Can fly

Has six legs

☒

Name: Bee

Lives in large groups

Is more than one colour

☒

☒

defineformtablechartoptions

2 viewers

search

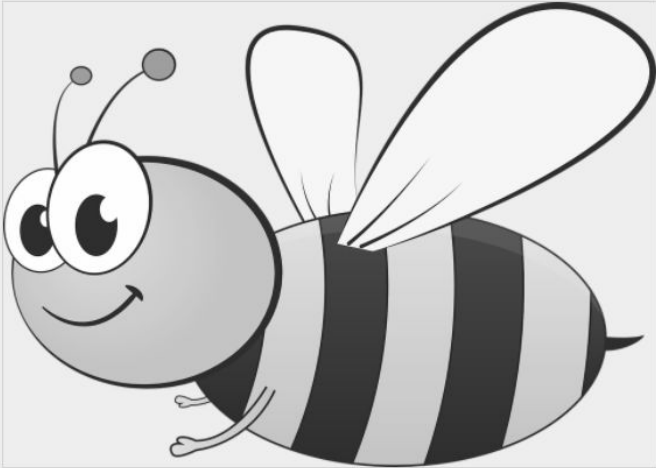
sort by [entered]

record 1 of 13

Mini Beast

Bumble bee

Picture



How many legs

6

Does it have wings

☒

Does it have a shell

☐

Save

Delete

Print

Source: J2E

