

5.6.9 A database table has been set up to compare FREEZER FEATURES.
A section of this database table is shown below:

| freezer id | price (\$) | lowest temp (°C) | capacity (m ³) | warranty (years) | colour |
|------------|------------|------------------|----------------------------|------------------|--------|
| A | 300.00 | -20 | 0.16 | 1 | white |
| B | 250.00 | -18 | 0.15 | 1 | silver |
| C | 400.00 | -22 | 0.25 | 2 | white |
| D | 300.00 | -20 | 0.18 | 3 | white |
| E | 520.00 | -40 | 0.35 | 3 | silver |
| F | 360.00 | -25 | 0.30 | 1 | white |
| G | 410.00 | -30 | 0.30 | 2 | white |
| H | 290.00 | -18 | 0.20 | 2 | silver |

- (a) How many (i) records
(ii) fields
are shown in this section of the database?

- (b) Which field is the primary key?
- (c) What items would be output from this query-by-example?

| | | | | |
|-----------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Field: | freezer id | price (\$) | warranty (years) | colour |
| Table: | FREEZER FEATURES | FREEZER FEATURES | FREEZER FEATURES | FREEZER FEATURES |
| Sort: | | | | |
| Show: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Criteria: | | | >1 | = 'silver' |
| or: | | >300 | | |

- (d) Complete a query-by-example grid to find all freezers which operate below -25°C and have a capacity which is more than 0.24 m^3 .

| | | | | |
|-----------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Field: | | | | |
| Table: | | | | |
| Sort: | | | | |
| Show: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Criteria: | | | | |
| or: | | | | |

5.6.10 A database table was set up to show various features of a number of HOTELS near an airport. Part of this database table is shown below:

| ref no | hotel | no stars | weekday tariff (\$) | weekend tariff (\$) | no of rooms | km to airport |
|--------|-----------|----------|---------------------|---------------------|-------------|---------------|
| 1 | Grand | 3 | 50.00 | 40.00 | 21 | 5 |
| 2 | Northern | 4 | 70.00 | 60.00 | 64 | 4 |
| 3 | Western | 2 | 45.00 | 40.00 | 20 | 8 |
| 4 | Quality | 5 | 100.00 | 75.00 | 150 | 2 |
| 5 | Albion | 3 | 60.00 | 50.00 | 40 | 15 |
| 6 | Orion | 2 | 35.00 | 25.00 | 32 | 20 |
| 7 | Denver | 2 | 40.00 | 30.00 | 20 | 15 |
| 8 | Wellbeing | 3 | 45.00 | 35.00 | 50 | 10 |
| 9 | Classic | 4 | 80.00 | 60.00 | 75 | 6 |

- (a) How many records are shown in this section of the database table?
- (b) Which field is the primary key?

(c) If the following query-by-example grid was used:

| | | | |
|-----------|-------------------------------------|--------------------------|--------------------------|
| Field: | ref no | no stars | weekend tariff (\$) |
| Table: | HOTELS | HOTELS | HOTELS |
| Sort: | | | |
| Show: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Criteria: | | = 4 | |
| or: | | | >45 |

What would be output?

(d) Write down the query-by-example grid to find all hotels which are less than 10 km from the airport or have more than 50 rooms and a weekday tariff which is less than \$100.

| | | | | |
|-----------|--------------------------|--------------------------|--------------------------|--------------------------|
| Field: | | | | |
| Table: | | | | |
| Sort: | | | | |
| Show: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Criteria: | | | | |
| or: | | | | |

(e) Write down the query-by-example grid to find all hotels showing ref no only, with the records in **ascending order** after being sorted on **weekday tariff (\$)**.

| | | | | |
|-----------|--------------------------|--------------------------|--------------------------|--------------------------|
| Field: | | | | |
| Table: | | | | |
| Sort: | | | | |
| Show: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Criteria: | | | | |
| or: | | | | |