

# SQL - revision

Data is extracted and changed using **queries**

These are written in **Structured Query Language (SQL)**

**Four types of query:**

1. SELECT (SFWO)
2. INSERT INTO (IV)
3. UPDATE (USW)
4. DELETE (DW)

# SQL Commands - SELECT

```
SELECT ProductName, Price, Stock  
FROM foods  
WHERE Price >= 1  
ORDER BY Price ASC;
```

NB: basic query type only - see next slide for multi-table SELECT

# Multi-table SELECT

```
SELECT Airport.AirportName,  
Airport.Terminals, Country.Currency  
FROM Airport, Country  
WHERE Airport.Terminals > 2 AND  
Airport.CountryName = Country.CountryName  
ORDER BY Airport.AirportName ASC;
```

- Link the tables using the **foreign key** in the `WHERE`
- The **AND** is really important in the `WHERE`
- Use dot notation everytime you reference a field

# SQL Commands - INSERT

```
INSERT INTO foods (ProductCode,  
ProductName, Price, SupplierID,  
Stock)
```

```
VALUES ("1321T", "Chopped Tomatoes",  
0.75, "S121/A", 17);
```

- Note the use of quotes for strings

# SQL Commands - UPDATE

```
UPDATE foods
```

```
SET Stock = 15
```

```
WHERE ProductCode = "1239T";
```

- Always use the primary key for WHERE

# SQL Commands - DELETE

```
DELETE FROM foods
```

```
WHERE ProductCode = "4550F";
```

- The “quotes” are important where fields are data type string
- Always use the primary key for WHERE