Database Table

A database table is a table with structured data.

The following table shows a database table with health data extracted from a sports watch:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Duration** | **Average\_Pulse** | **Max\_Pulse** | **Calorie\_Burnage** | **Hours\_Work** | **Hours\_Sleep** |
| 30 | 80 | 120 | 240 | 10 | 7 |
| 30 | 85 | 120 | 250 | 10 | 7 |
| 45 | 90 | 130 | 260 | 8 | 7 |
| 45 | 95 | 130 | 270 | 8 | 7 |
| 45 | 100 | 140 | 280 | 0 | 7 |
| 60 | 105 | 140 | 290 | 7 | 8 |
| 60 | 110 | 145 | 300 | 7 | 8 |
| 60 | 115 | 145 | 310 | 8 | 8 |
| 75 | 120 | 150 | 320 | 0 | 8 |
| 75 | 125 | 150 | 330 | 8 | 8 |

This dataset contains information of a typical training session such as duration, average pulse, calorie burnage etc.

Database Table Structure

A database table consists of column(s) and row(s):

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 |
|  | **Duration** | **Average\_Pulse** | **Max\_Pulse** | **Calorie\_Burnage** | **Hours\_Work** | **Hours\_Sleep** |
| Row 1 | 30 | 80 | 120 | 240 | 10 | 7 |
| Row 2 | 30 | 85 | 120 | 250 | 10 | 7 |
| Row 3 | 45 | 90 | 130 | 260 | 8 | 7 |
| Row 4 | 45 | 95 | 130 | 270 | 8 | 7 |
| Row 5 | 45 | 100 | 140 | 280 | 0 | 7 |
| Row 6 | 60 | 105 | 140 | 290 | 7 | 8 |
| Row 7 | 60 | 110 | 145 | 300 | 7 | 8 |
| Row 8 | 60 | 115 | 145 | 310 | 8 | 8 |

A row is a horizontal representation of data.

A column is a vertical representation of data.

Variables: A variable is defined as something that can be measured or counted. Examples can be characters, numbers or time.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Duration** | **Average\_Pulse** | **Max\_Pulse** | **Calorie\_Burnage** | **Hours\_Work** | **Hours\_Sleep** |
| 30 | 80 | 120 | 240 | 10 | 7 |
| 30 | 85 | 120 | 250 | 10 | 7 |
| 45 | 90 | 130 | 260 | 8 | 7 |
| 45 | 95 | 130 | 270 | 8 | 7 |
| 45 | 100 | 140 | 280 | 0 | 7 |
| 60 | 105 | 140 | 290 | 7 | 8 |
| 60 | 110 | 145 | 300 | 7 | 8 |

In the example under, we can observe that each column represents a variable. There are 6 columns, meaning that there are 6 variables (Duration, Average\_Pulse, Max\_Pulse, Calorie\_Burnage, Hours\_Work, Hours\_Sleep). There are 11 rows, meaning that each variable has 10 observations.