# **SQL ORDER BY**

**Normal SQL ORDER BY:**

1. The ORDER BY keyword is used to sort the result-set in ascending or descending order.
2. Example:

|  |
| --- |
| SELECT \* FROM Products  ORDER BY Price; |

1. The syntax:

|  |
| --- |
| SELECT column1, column2, ...  FROM table\_name  ORDER BY column1, column2, ... ASC|DESC; |

1. Example of normal sql order outcome:

|  |
| --- |
| SELECT \* FROM Products  ORDER BY Price; |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ProductID** | **ProductName** | **SupplierID** | **CategoryID** | **Unit** | **Price** |
| 33 | Geitost | 15 | 4 | 500 g | 2.5 |
| 24 | Guaraná Fantástica | 10 | 1 | 12 - 355 ml cans | 4.5 |
| 13 | Konbu | 6 | 8 | 2 kg box | 6 |
| 52 | Filo Mix | 24 | 5 | 16 - 2 kg boxes | 7 |
| 54 | Tourtière | 25 | 6 | 16 pies | 7.45 |

**DESC SQL ORDER BY:**

1. The ORDER BY keyword sorts the records in ascending order by default. To sort the records in descending order, use the DESC keyword.

|  |
| --- |
| SELECT \* FROM Products  ORDER BY Price DESC; |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ProductID** | **ProductName** | **SupplierID** | **CategoryID** | **Unit** | **Price** |
| 38 | Côte de Blaye | 18 | 1 | 12 - 75 cl bottles | 263.5 |
| 29 | Thüringer Rostbratwurst | 12 | 6 | 50 bags x 30 sausgs. | 123.79 |
| 9 | Mishi Kobe Niku | 4 | 6 | 18 - 500 g pkgs. | 97 |
| 20 | Sir Rodney's Marmalade | 8 | 3 | 30 gift boxes | 81 |

**Order Alphabetically:**

1. For string values the ORDER BY keyword will order alphabetically:

|  |
| --- |
| SELECT \* FROM Products  ORDER BY ProductName; |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ProductID** | **ProductName** | **SupplierID** | **CategoryID** | **Unit** | **Price** |
| 17 | Alice Mutton | 7 | 6 | 20 - 1 kg tins | 39 |
| 3 | Aniseed Syrup | 1 | 2 | 12 - 550 ml bottles | 10 |
| 40 | Boston Crab Meat | 19 | 8 | 24 - 4 oz tins | 18.4 |
| 60 | Camembert Pierrot | 28 | 4 | 15 - 300 g rounds | 34 |

**Alphabetically DESC:**

1. To sort the table reverse alphabetically, use the DESC keyword:

|  |
| --- |
| SELECT \* FROM Products  ORDER BY ProductName DESC; |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ProductID** | **ProductName** | **SupplierID** | **CategoryID** | **Unit** | **Price** |
| 47 | Zaanse koeken | 22 | 3 | 10 - 4 oz boxes | 9.5 |
| 64 | Wimmers gute Semmelknödel | 12 | 5 | 20 bags x 4 pieces | 33.25 |
| 63 | Vegie-spread | 7 | 2 | 15 - 625 g jars | 43.9 |
| 50 | Valkoinen suklaa | 23 | 3 | 12 - 100 g bars | 16.25 |
| 7 | Uncle Bob's Organic Dried Pears | 3 | 7 | 12 - 1 lb pkgs. | 30 |

**ORDER BY Several Columns:**

1. The following SQL statement selects all customers from the "Customers" table, sorted by the "Country" and the "CustomerName" column. This means that it orders by Country, but if some rows have the same Country, it orders them by CustomerName:

|  |
| --- |
| SELECT \* FROM Customers  ORDER BY Country, CustomerName; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 12 | Cactus Comidas para llevar | Patricio Simpson | Cerrito 333 | Buenos Aires | 1010 | Argentina |
| 54 | Océano Atlántico Ltda. | Yvonne Moncada | Ing. Gustavo Moncada 8585 Piso 20-A | Buenos Aires | 1010 | Argentina |
| 64 | Rancho grande | Sergio Gutiérrez | Av. del Libertador 900 | Buenos Aires | 1010 | Argentina |
| 20 | Ernst Handel | Roland Mendel | Kirchgasse 6 | Graz | 8010 | Austria |
| 59 | Piccolo und mehr | Georg Pipps | Geislweg 14 | Salzburg | 5020 | Austria |
| 50 | Maison Dewey | Catherine Dewey | Rue Joseph-Bens 532 | Bruxelles | B-1180 | Belgium |
| 76 | Suprêmes délices | Pascale Cartrain | Boulevard Tirou, 255 | Charleroi | B-6000 | Belgium |
| 15 | Comércio Mineiro | Pedro Afonso | Av. dos Lusíadas, 23 | São Paulo | 05432-043 | Brazil |
| 21 | Familia Arquibaldo | Aria Cruz | Rua Orós, 92 | São Paulo | 05442-030 | Brazil |
| 31 | Gourmet Lanchonetes | André Fonseca | Av. Brasil, 442 | Campinas | 04876-786 | Brazil |
| 34 | Hanari Carnes | Mario Pontes | Rua do Paço, 67 | Rio de Janeiro | 05454-876 | Brazil |
| 61 | Que Delícia | Bernardo Batista | Rua da Panificadora, 12 | Rio de Janeiro | 02389-673 | Brazil |
| 62 | Queen Cozinha | Lúcia Carvalho | Alameda dos Canàrios, 891 | São Paulo | 05487-020 | Brazil |
| 67 | Ricardo Adocicados | Janete Limeira | Av. Copacabana, 267 | Rio de Janeiro | 02389-890 | Brazil |
| 81 | Tradição Hipermercados | Anabela Domingues | Av. Inês de Castro, 414 | São Paulo | 05634-030 | Brazil |
| 88 | Wellington Importadora | Paula Parente | Rua do Mercado, 12 | Resende | 08737-363 | Brazil |
| 10 | Bottom-Dollar Marketse | Elizabeth Lincoln | 23 Tsawassen Blvd. | Tsawassen | T2F 8M4 | Canada |
| 42 | Laughing Bacchus Wine Cellars | Yoshi Tannamuri | 1900 Oak St. | Vancouver | V3F 2K1 | Canada |
| 51 | Mère Paillarde | Jean Fresnière | 43 rue St. Laurent | Montréal | H1J 1C3 | Canada |
| 73 | Simons bistro | Jytte Petersen | Vinbæltet 34 | København | 1734 | Denmark |
| 83 | Vaffeljernet | Palle Ibsen | Smagsløget 45 | Århus | 8200 | Denmark |
| 87 | Wartian Herkku | Pirkko Koskitalo | Torikatu 38 | Oulu | 90110 | Finland |
| 90 | Wilman Kala | Matti Karttunen | Keskuskatu 45 | Helsinki | 21240 | Finland |
| 7 | Blondel père et fils | Frédérique Citeaux | 24, place Kléber | Strasbourg | 67000 | France |
| 9 | Bon app' | Laurence Lebihans | 12, rue des Bouchers | Marseille | 13008 | France |
| 18 | Du monde entier | Janine Labrune | 67, rue des Cinquante Otages | Nantes | 44000 | Fran |

**Using Both ASC and DESC:**

1. The following SQL statement selects all customers from the "Customers" table, sorted ascending by the "Country" and descending by the "CustomerName" column:

|  |
| --- |
| SELECT \* FROM Customers  ORDER BY Country ASC, CustomerName DESC; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 64 | Rancho grande | Sergio Gutiérrez | Av. del Libertador 900 | Buenos Aires | 1010 | Argentina |
| 54 | Océano Atlántico Ltda. | Yvonne Moncada | Ing. Gustavo Moncada 8585 Piso 20-A | Buenos Aires | 1010 | Argentina |
| 12 | Cactus Comidas para llevar | Patricio Simpson | Cerrito 333 | Buenos Aires | 1010 | Argentina |
| 59 | Piccolo und mehr | Georg Pipps | Geislweg 14 | Salzburg | 5020 | Austria |
| 20 | Ernst Handel | Roland Mendel | Kirchgasse 6 | Graz | 8010 | Austria |
| 76 | Suprêmes délices | Pascale Cartrain | Boulevard Tirou, 255 | Charleroi | B-6000 | Belgium |
| 50 | Maison Dewey | Catherine Dewey | Rue Joseph-Bens 532 | Bruxelles | B-1180 | Belgium |
| 88 | Wellington Importadora | Paula Parente | Rua do Mercado, 12 | Resende | 08737-363 | Brazil |
| 81 | Tradição Hipermercados | Anabela Domingues | Av. Inês de Castro, 414 | São Paulo | 05634-030 | Brazil |
| 67 | Ricardo Adocicados | Janete Limeira | Av. Copacabana, 267 | Rio de Janeiro | 02389-890 | Brazil |
| 62 | Queen Cozinha | Lúcia Carvalho | Alameda dos Canàrios, 891 | São Paulo | 05487-020 | Brazil |
| 61 | Que Delícia | Bernardo Batista | Rua da Panificadora, 12 | Rio de Janeiro | 02389-673 | Brazil |
| 34 | Hanari Carnes | Mario Pontes | Rua do Paço, 67 | Rio de Janeiro | 05454-876 | Brazil |
| 31 | Gourmet Lanchonetes | André Fonseca | Av. Brasil, 442 | Campinas | 04876-786 | Bra |