

# BIKE STORE SQL PROJECT

1. Can you retrieve the first name, last name, and email of all customers from New York?

```
SELECT first_name, last_name, email  
FROM Customers  
WHERE State = 'NY';
```

| first_name  | last_name | email                       |
|-------------|-----------|-----------------------------|
| Debra       | Burks     | debra.burks@yahoo.com       |
| Daryl       | Spence    | daryl.spence@aol.com        |
| Lyndsey     | Bean      | lyndsey.bean@hotmail.com    |
| Latasha     | Hays      | latasha.hays@hotmail.com    |
| Jacqueline  | Duncan    | jacqueline.duncan@yahoo.com |
| Genoveva    | Baldwin   | genoveva.baldwin@msn.com    |
| Pamelia     | Newman    | pamelia.newman@gmail.com    |
| Deshawn     | Mendoza   | deshawn.mendoza@yahoo.com   |
| Robby       | Sykes     | robby.sykes@hotmail.com     |
| Linnie      | Branch    | linnie.branch@gmail.com     |
| Emmitt      | Sanchez   | emmitt.sanchez@hotmail.com  |
| Caren       | Stephens  | caren.stephens@msn.com      |
| Georgetta   | Hardin    | georgetta.hardin@aol.com    |
| Lizzette    | Stein     | lizzette.stein@yahoo.com    |
| Adelle      | Larsen    | adelle.larsen@gmail.com     |
| Kaylee      | English   | kaylee.english@msn.com      |
| Regenia     | Vaughan   | regenia.vaughan@gmail.com   |
| Theo        | Reese     | theo.reese@gmail.com        |
| Santos      | Valencia  | santos.valencia@yahoo.com   |
| Jeanice     | Frost     | jeanice.frost@hotmail.com   |
| Syreeta     | Hendricks | syreeta.hendricks@msn.com   |
| Brittney    | Woodward  | brittney.woodward@aol.com   |
| Guillermina | Noble     | guillermina.noble@msn.com   |

2. What are the names of all products that have a list price over \$1000, ordered from most expensive to least expensive?

```
SELECT product_name, list_price  
FROM Products  
WHERE List_price > 1000  
ORDER BY list_price DESC;
```

| product_name               | list_price |
|----------------------------|------------|
| Trek Domane SLR 8 Wo...    | 6499.99    |
| Trek Domane SL Fram...     | 6499.99    |
| Trek Domane SL Fram...     | 6499.99    |
| Trek Emonda SLR 8 - 2...   | 6499.99    |
| Trek Silque SLR 7 Wo...    | 5999.99    |
| Trek Domane SLR 6 Di...    | 5499.99    |
| Trek Domane SL 8 Disc...   | 5499.99    |
| Trek Domane SLR 6 Di...    | 5499.99    |
| Trek Domane SLR 6 Di...    | 5499.99    |
| Trek Fuel EX 9.8 27.5 P... | 5299.99    |
| Trek Remedy 9.8 - 2017     | 5299.99    |
| Trek Fuel EX 9.8 29 - 2... | 4999.99    |
| Trek Madone 9.2 - 2017     | 4999.99    |
| Trek Powerfly 8 FS Plu...  | 4999.99    |
| Trek Remedy 9.8 27.5 -...  | 4999.99    |
| Trek Domane SLR 6 - 2...   | 4999.99    |
| Trek Domane SL 7 Wo...     | 4999.99    |
| Trek Powerfly 7 FS - 2018  | 4999.99    |
| Trek Super Commuter+...    | 4999.99    |
| Trek Emonda SL 7 - 2018    | 4499.99    |
| Trek Emonda SLR 6 - 2...   | 4499.99    |
| Trek CrossRip+ - 2018      | 4499.99    |
| Trek Powerfly 5 FS - 2018  | 4499.99    |

3. Could you list all orders that were shipped on or after January 15th, 2016?

```
SELECT *  
FROM Orders  
WHERE shipped_date >= '2016-01-15';
```

| order_id | customer_id | order_status | order_date | required_da... | shipped_date | store_id | staff_id |
|----------|-------------|--------------|------------|----------------|--------------|----------|----------|
| 16       | 552         | 4            | 2016-01-12 | 2016-01-15     | 2016-01-15   | 1        | 3        |
| 18       | 541         | 4            | 2016-01-14 | 2016-01-17     | 2016-01-15   | 1        | 3        |
| 19       | 696         | 4            | 2016-01-14 | 2016-01-17     | 2016-01-16   | 1        | 2        |
| 20       | 923         | 4            | 2016-01-14 | 2016-01-16     | 2016-01-17   | 1        | 2        |
| 21       | 1250        | 4            | 2016-01-15 | 2016-01-16     | 2016-01-18   | 2        | 6        |
| 22       | 1035        | 4            | 2016-01-16 | 2016-01-18     | 2016-01-17   | 1        | 2        |
| 23       | 1149        | 4            | 2016-01-16 | 2016-01-19     | 2016-01-19   | 1        | 2        |
| 24       | 636         | 4            | 2016-01-18 | 2016-01-20     | 2016-01-19   | 2        | 7        |
| 25       | 657         | 4            | 2016-01-18 | 2016-01-21     | 2016-01-21   | 2        | 6        |
| 26       | 1280        | 4            | 2016-01-18 | 2016-01-21     | 2016-01-19   | 2        | 7        |
| 27       | 57          | 4            | 2016-01-19 | 2016-01-21     | 2016-01-20   | 2        | 7        |
| 28       | 252         | 4            | 2016-01-19 | 2016-01-20     | 2016-01-21   | 2        | 6        |
| 29       | 437         | 4            | 2016-01-20 | 2016-01-22     | 2016-01-21   | 2        | 6        |
| 30       | 1348        | 4            | 2016-01-20 | 2016-01-21     | 2016-01-21   | 2        | 6        |
| 31       | 1238        | 4            | 2016-01-20 | 2016-01-22     | 2016-01-22   | 3        | 8        |
| 32       | 1259        | 4            | 2016-01-21 | 2016-01-24     | 2016-01-22   | 1        | 3        |
| 33       | 236         | 4            | 2016-01-21 | 2016-01-22     | 2016-01-22   | 2        | 6        |
| 34       | 80          | 4            | 2016-01-22 | 2016-01-25     | 2016-01-23   | 2        | 6        |
| 35       | 813         | 4            | 2016-01-22 | 2016-01-25     | 2016-01-24   | 2        | 7        |
| 36       | 1321        | 4            | 2016-01-23 | 2016-01-24     | 2016-01-24   | 2        | 6        |
| 37       | 164         | 4            | 2016-01-25 | 2016-01-28     | 2016-01-28   | 2        | 6        |
| 38       | 583         | 4            | 2016-01-25 | 2016-01-27     | 2016-01-28   | 2        | 7        |
| 39       | 1296        | 4            | 2016-01-25 | 2016-01-26     | 2016-01-26   | 12       | 17       |

4. Which staff members are currently active, and at which store do they work?

```
SELECT St.first_name, last_name, S.store_name
FROM Staffs St
INNER JOIN Stores S
on St.store_id = S.store_id
WHERE St.active = 1;
```

|  | first_name | last_name | store_name       |
|--|------------|-----------|------------------|
|  | Fabiola    | Jackson   | Santa Cruz Bikes |
|  | Mireya     | Copeland  | Santa Cruz Bikes |
|  | Genna      | Serrano   | Santa Cruz Bikes |
|  | Virgie     | Wiggins   | Santa Cruz Bikes |
|  | Jannette   | David     | Baldwin Bikes    |
|  | Marcelene  | Boyer     | Baldwin Bikes    |
|  | Venita     | Daniel    | Baldwin Bikes    |
|  | Kali       | Vargas    | Rowlett Bikes    |
|  | Layla      | Terrell   | Rowlett Bikes    |
|  | Bernardine | Houston   | Rowlett Bikes    |

5. What are the names of all bicycle brands available in the stores?

```
SELECT brand_name
FROM Brands;
```

|  | brand_name   |
|--|--------------|
|  | Electra      |
|  | Haro         |
|  | Heller       |
|  | Pure Cycles  |
|  | Ritchey      |
|  | Strider      |
|  | Sun Bicycles |
|  | Surly        |
|  | Trek         |

6. How many products are there in each product category?

```
SELECT c.category_name, COUNT(p.product_id) AS product_count
FROM Categories c
Join Products p
ON c.category_id = p.category_id
GROUP BY c.category_name;
```

|  | category_name       | product_count |
|--|---------------------|---------------|
|  | Children Bicycles   | 59            |
|  | Comfort Bicycles    | 30            |
|  | Cruisers Bicycles   | 78            |
|  | Cyclocross Bicycles | 10            |
|  | Electric Bikes      | 24            |
|  | Mountain Bikes      | 60            |
|  | Road Bikes          | 60            |

7. Which store has the highest number of staff members?

```
SELECT st.store_name, COUNT(s.staff_id) AS No_staff
FROM Stores st
JOIN staffs s
ON st.store_id = s.store_id
GROUP BY st.store_name
ORDER BY No_staff DESC
LIMIT 1;
```

|  | store_name       | No_staff |  |
|--|------------------|----------|--|
|  | Santa Cruz Bikes | 4        |  |

8. Can you find the total revenue for each brand, considering the quantity, list price, and discount?

```
SELECT b.brand_name, SUM(o.quantity * o.list_price * (1 - o.discount)) AS total_revenue
FROM Brands b
JOIN Products p
on b.brand_id = p.brand_id
JOIN order_items o
on o.product_id = p.product_id
GROUP BY b.brand_name;
```

|  | brand_name   | total_revenue |  |
|--|--------------|---------------|--|
|  | Electra      | 1205320.8196  |  |
|  | Haro         | 185384.5537   |  |
|  | Heller       | 171459.0757   |  |
|  | Pure Cycles  | 149476.3400   |  |
|  | Ritchey      | 78898.9480    |  |
|  | Strider      | 4320.4789     |  |
|  | Sun Bicycles | 341994.9275   |  |
|  | Surly        | 949507.0633   |  |
|  | Trek         | 4602754.3509  |  |

9. Which customers have placed more than 5 orders?

```
SELECT c.first_name, c.last_name, COUNT(o.order_id) AS Total_order
FROM Customers c
JOIN Orders o
ON c.customer_id = o.customer_id
GROUP BY c.customer_id
HAVING COUNT(o.order_id) > 5;
```

10. What is the name of the most expensive product?

```
SELECT product_name
FROM Products
WHERE list_price = (SELECT MAX(list_price) FROM products);
```

|  | product_name            |  |
|--|-------------------------|--|
|  | Trek Domane SLR 9 Di... |  |

11. Could you list the products that have never been ordered?

```
SELECT product_name
FROM Products p
JOIN Order_items oi
ON p.product_id = oi.product_id
WHERE oi.order_id IS NULL;
```

12. List all products that are out of stock in the 'Santa Cruz Bikes' store?

```
SELECT p.product_name
FROM Products p
JOIN Stocks s
ON p.product_id = s.product_id
JOIN Stores st
on st.store_id = s.store_id
WHERE st.store_name = 'Santa Cruz Bikes' AND s.quantity = 0;
```

| product_name                                 |  |
|--|--|
| Surly Ice Cream Truck Frameset - 2016        |  |
| Trek Remedy 29 Carbon Frameset - 2016        |  |
| Trek Farley Alloy Frameset - 2017            |  |
| Trek Fuel EX 5 27.5 Plus - 2017              |  |
| Haro Shredder 20 - 2017                      |  |
| Trek Emonda SLR 6 - 2018                     |  |
| Surly Pack Rat - 2018                        |  |
| Surly Straggler - 2018                       |  |
| Electra Townie Original 3i EQ Ladies' - 2018 |  |
| Electra Townie Original 1 - 2018             |  |

13. Find the average discount given on all orders?

```
SELECT AVG(discount) AS avg_discount
FROM Order_items;
```

| avg_discount |  |
|--------------|--|
| 0.105373     |  |

14. List the staff members who manage at least one other staff member?

```
SELECT DISTINCT m.first_name, m.last_name
FROM staffs e
JOIN staffs m
on e.staff_id = m.manager_id;
```

| first_name | last_name |
|------------|-----------|
| Mireya     | Copeland  |
| Genna      | Serrano   |
| Virgie     | Wiggins   |
| Jannette   | David     |
| Marcelene  | Boyer     |
| Venita     | Daniel    |
| Kali       | Vargas    |
| Layla      | Terrell   |
| Bernardine | Houston   |

15. Find the total number of bikes sold for each brand?

```
SELECT b.brand_name, SUM(oi.quantity) AS total_sales
FROM Brands b
JOIN Products p
ON b.brand_id = p.brand_id
JOIN Order_items oi
on oi.product_id = p.product_id
GROUP BY b.brand_name;
```

| brand_name   | total_sales |
|--------------|-------------|
| Electra      | 2612        |
| Haro         | 331         |
| Heller       | 138         |
| Pure Cycles  | 376         |
| Ritchey      | 118         |
| Strider      | 25          |
| Sun Bicycles | 731         |
| Surly        | 908         |
| Trek         | 1839        |