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1. Basics SQL Queries to create database and table.

```
mysql> create database 23MCA1030;
Query OK, 1 row affected (0.00 sec)

mysql> use 23MCA1030;
Database changed
mysql> CREATE TABLE 23mca1030(
    ->     BookID INT PRIMARY KEY NOT NULL,
    ->     Title VARCHAR(100) NOT NULL,
    ->     Author VARCHAR(50) NOT NULL,
    ->     PublicationYear INT NOT NULL,
    ->     Quantity INT NOT NULL
    -> );
Query OK, 0 rows affected (0.01 sec)
```

2. Inserting data in SQL

```
mysql> INSERT INTO 23mca1030 (BookID, Title, Author, PublicationYear, Quantity)
    -> VALUES
    ->     (1, 'Clean Code: A Handbook of Agile Software Craftsmanship', 'Robert C. Martin', 2008, 10),
    ->     (2, 'JavaScript: The Good Parts', 'Douglas Crockford', 2008, 15),
    ->     (3, 'Python Crash Course: A Hands-On, Project-Based Introduction to Programming', 'Eric Matthes', 2015, 8),
    ->     (4, 'Rich Dad Poor Dad', 'Robert T. Kiyosaki', 1997, 20),
    ->     (5, 'Harry Potter and the Sorcerer's Stone', 'J.K. Rowling', 1997, 12),
    ->     (6, 'The Catcher in the Rye', 'J.D. Salinger', 1951, 7),
    ->     (7, 'The Hobbit', 'J.R.R. Tolkien', 1937, 18),
    ->     (8, 'The Da Vinci Code', 'Dan Brown', 2003, 14),
    ->     (9, 'Pride and Prejudice', 'Jane Austen', 1813, 9),
    ->     (10, 'The Alchemist', 'Paulo Coelho', 1988, 16);
Query OK, 10 rows affected (0.00 sec)
Records: 10 Duplicates: 0 Warnings: 0
```

3. SQL Queries to view all data in our table

```
mysql> select * from 23mca1030;
```

BookID	Title	Author	PublicationYear	Quantity
1	Clean Code: A Handbook of Agile Software Craftsmanship	Robert C. Martin	2008	10
2	JavaScript: The Good Parts	Douglas Crockford	2008	15
3	Python Crash Course: A Hands-On, Project-Based Introduction to Programming	Eric Matthes	2015	8
4	Rich Dad Poor Dad	Robert T. Kiyosaki	1997	20
5	Harry Potter and the Sorcerer's Stone	J.K. Rowling	1997	12
6	The Catcher in the Rye	J.D. Salinger	1951	7
7	The Hobbit	J.R.R. Tolkien	1937	18
8	The Da Vinci Code	Dan Brown	2003	14
9	Pride and Prejudice	Jane Austen	1813	9
10	The Alchemist	Paulo Coelho	1988	16

```
10 rows in set (0.00 sec)
```

4. Using SQL Built in functions and SQL View

```
mysql> CREATE VIEW PopularBooks AS SELECT BookID, Title, Author FROM 23mca1030 WHERE Quantity > 10;
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> SELECT SUM(Quantity) AS TotalBooks FROM 23mca1030;
```

```
+-----+
| TotalBooks |
+-----+
|         129 |
+-----+
```

```
1 row in set (0.00 sec)
```

```
mysql> SELECT AVG(PublicationYear) AS AvgPublicationYear FROM 23mca1030;
```

```
+-----+
| AvgPublicationYear |
+-----+
|          1971.7000 |
+-----+
```

```
1 row in set (0.00 sec)
```

```
mysql> SELECT * FROM PopularBooks;
```

```
+-----+-----+-----+
| BookID | Title                                | Author          |
+-----+-----+-----+
| 2      | JavaScript: The Good Parts          | Douglas Crockford |
| 4      | Rich Dad Poor Dad                   | Robert T. Kiyosaki |
| 5      | Harry Potter and the Sorcerer's Stone | J.K. Rowling      |
| 7      | The Hobbit                           | J.R.R. Tolkien     |
| 8      | The Da Vinci Code                   | Dan Brown         |
| 10     | The Alchemist                       | Paulo Coelho       |
+-----+-----+-----+
```

```
6 rows in set (0.00 sec)
```