SQL Cheat Sheet for Beginners

# 1. Basics

---------

```
SELECT column1, column2 FROM table_name;

SELECT * FROM table_name;
```

# 2. Filtering Data

----------------

```
SELECT * FROM table_name WHERE condition;

SELECT * FROM users WHERE age > 18;

SELECT * FROM users WHERE name LIKE 'A%';
```

# 3. Sorting Data

---------------

```
SELECT * FROM users ORDER BY age ASC;

SELECT * FROM users ORDER BY name DESC;
```

# 4. Inserting Data

----------------

```
INSERT INTO table_name (column1, column2) VALUES (value1, value2);

INSERT INTO users (name, age) VALUES ('Alice', 25);
```

# 5. Updating Data

----------------

```sql
UPDATE table_name SET column1 = value1 WHERE condition;

UPDATE users SET age = 30 WHERE name = 'Alice';
```

## 6. Deleting Data

----------------

```sql
DELETE FROM table_name WHERE condition;

DELETE FROM users WHERE age < 18;
```

## 7. Table Operations

--------------------

```sql
CREATE TABLE users (

    id INT PRIMARY KEY AUTO_INCREMENT,

    name VARCHAR(100),

    age INT

);
DROP TABLE users;
```

## 8. Aggregate Functions

----------------------

```sql
SELECT COUNT(*) FROM users;

SELECT AVG(age) FROM users;

SELECT MAX(age), MIN(age) FROM users;
```

## 9. Grouping & Filtering

----------------------

```sql
SELECT age, COUNT(*) FROM users GROUP BY age;
```

```sql
SELECT age, COUNT(*) FROM users GROUP BY age HAVING COUNT(*) > 1;
```

## 10. Joining Tables

------------------

```sql
SELECT a.name, b.salary

FROM employees a

JOIN payroll b ON a.id = b.emp_id;
```

## 11. Creating Users and Granting Privileges (MySQL Specific)

-----------------------------------------------------------

```sql
CREATE USER 'newuser'@'localhost' IDENTIFIED BY 'password';

GRANT SELECT, INSERT ON database.* TO 'newuser'@'localhost';

FLUSH PRIVILEGES;
```