

In MySQL, character functions are used to manipulate string data. Here's a list of some commonly used character functions, along with explanations and examples:

### **1. CHAR\_LENGTH()**

Returns the length of a string in characters.

```
SELECT CHAR_LENGTH('Hello World'); -- Returns 11
```

### **2. LENGTH()**

Returns the length of a string in bytes.

```
SELECT LENGTH('Hello World'); -- Returns 11
```

### **3. UPPER()**

Converts a string to uppercase.

```
SELECT UPPER('Hello World'); -- Returns 'HELLO WORLD'
```

### **4. LOWER()**

Converts a string to lowercase.

```
SELECT LOWER('Hello World'); -- Returns 'hello world'
```

### **5. CONCAT()**

Concatenates two or more strings.

```
SELECT CONCAT('Hello', ' ', 'World'); -- Returns 'Hello World'
```

### **6. SUBSTRING()**

Returns a substring from a string.

```
SELECT SUBSTRING('Hello World', 1, 5); -- Returns 'Hello'
```

### **7. TRIM()**

Removes leading and trailing spaces from a string.

```
SELECT TRIM(' Hello World '); -- Returns 'Hello World'
```

### **8. REPLACE()**

Replaces all occurrences of a substring within a string.

```
SELECT REPLACE('Hello World', 'World', 'MySQL'); -- Returns 'Hello MySQL'
```

### **9. FIND\_IN\_SET()**

Finds the position of a string within a comma-separated list.

```
SELECT FIND_IN_SET('B', 'A,B,C'); -- Returns 2
```

### **10. LEFT()**

Returns the leftmost characters from a string.

```
SELECT LEFT('Hello World', 5); -- Returns 'Hello'
```

### **11. RIGHT()**

Returns the rightmost characters from a string.

```
SELECT RIGHT('Hello World', 5); -- Returns 'World'
```

### **12. REVERSE()**

Reverses the characters in a string.

```
SELECT REVERSE('Hello'); -- Returns 'olleH'
```

### **13. CHAR()**

Returns the character based on the ASCII value.

```
SELECT CHAR(65); -- Returns 'A'
```

### **14. ASCII()**

Returns the ASCII value of the leftmost character of a string.

```
SELECT ASCII('A'); -- Returns 65
```

### **15. LPAD() and RPAD()**

Pads a string to the left or right with another string.

```
SELECT LPAD('Hello', 10, '*'); -- Returns '*****Hello'
```

```
SELECT RPAD('Hello', 10, '*'); -- Returns 'Hello*****'
```

### **Example Usage**

```
SELECT  
    UPPER(EmployeeName) AS UppercaseName,  
    LENGTH(EmployeeName) AS NameLength,  
    TRIM(EmployeeName) AS TrimmedName  
FROM Employees;
```