

**DBMS LAB**  
**Experiment 10**  
**Built-in Functions**

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**Aim:**

Familiarize various Built-in functions available in MySQL.

**Functions and Codes:****String Functions**  
-----**1. ASCII**

It returns the ASCII value of the first character.

Syntax: ASCII(character)

```
select ASCII(fName) as ASCIIIfName from Staff39;
```

```
+-----+
| ASCIIIfName |
+-----+
|           77 |
|           68 |
|           65 |
|           83 |
|           74 |
|           74 |
+-----+
```

**2. CHAR\_LENGTH**

It returns the length of the string.

Syntax: CHAR\_LENGTH(string)

```
select CHAR_LENGTH("Hello World") as Stringlength;
```

```
+-----+
| Stringlength |
+-----+
|           11 |
+-----+
```

**3. CONCAT**

It concatenates given strings.

Syntax: CONCAT(expression1, expression2, expression3,...)

```
select CONCAT("Hello ", "World!") as String;
```

```
+-----+
| String       |
+-----+
| Hello World! |
+-----+
```

**4. LOWER**

It converts the string into its lower case equivalent.

Syntax: LOWER(text)

```
select LOWER("Turn THIS into lower CASE") as String;
```

```
+-----+
| String |
+-----+
| turn this into lower case |
+-----+
```

## 5. SUBSTRING

It extracts a substring from a string (start at position 6, extract 3 characters)

Syntax: SUBSTRING(string, start, length)

```
select SUBSTRING("Take any substring", 6, 3) as String;\
```

```
+-----+
| String |
+-----+
| any    |
+-----+
```

## Numeric Functions

-----

### 1. COS

It returns the cosine of a number.

Syntax: COS(number)

```
select COS(65);
```

```
+-----+
| COS(65) |
+-----+
| -0.562453851238172 |
+-----+
```

### 2. COUNT()

It returns the number of records returned by a select query.

Syntax: COUNT(expression)

```
select COUNT(branchNo) from Staff39;
```

```
+-----+
| COUNT(branchNo) |
+-----+
```

```

+-----+
|                6 |
+-----+

```

### 3. AVG()

It returns the average value of an expression.

Syntax: AVG(expression)

```
select AVG(salary) from Staff39;
```

```

+-----+
| AVG(salary) |
+-----+
| 17883.5000 |
+-----+

```

### 4. MAX()

It returns the maximum value in a set of values.

Syntax: MAX(expression)

```
select MAX(salary) from Staff39;
```

```

+-----+
| MAX(salary) |
+-----+
|      32445 |
+-----+

```

### 5. MIN()

It returns the minimum value in a set of values.

Syntax: MIN(expression)

```
select MIN(salary) from Staff39;
```

```

+-----+
| MIN(salary) |
+-----+
|      9270 |
+-----+

```

## Date Functions

### 1. CURDATE()

It returns the current date(in YYYY-MM-DD format)

Syntax: CURDATE()

```
select CURDATE();
```

```
+-----+
| CURDATE() |
+-----+
| 2022-12-04 |
+-----+
```

## 2. CURTIME()

It returns the current time(in HH-MM-SS format)

Syntax: CURTIME()

```
select CURTIME();
```

```
+-----+
| CURTIME() |
+-----+
| 20:03:25 |
+-----+
```

## 3. DATEDIFF()

It returns the number of days between two date values.

Syntax: DATEDIFF(date1, date2)

```
select DATEDIFF("2022-06-08","2022-05-15");
```

```
+-----+
| DATEDIFF("2022-06-08","2022-05-15") |
+-----+
| 24 |
+-----+
```

## 4. DAYNAME()

It returns the weekday name for a given date.

Syntax: DAYNAME(date)

```
select DAYNAME("2022-05-04");
```

```
+-----+
| DAYNAME("2022-05-04") |
+-----+
| Wednesday |
+-----+
```

## 5. WEEKDAY()

It returns the weekday number for a given date.

Syntax: WEEKDAY(date)

```
select WEEKDAY("2017-06-15");
```

```

+-----+
| WEEKDAY("2017-06-15") |
+-----+
|                        3 |
+-----+

```

## Advanced Functions

```
-----
```

### 1. BIN()

It returns the binary value of a number.

Syntax: BIN(number)

```
select BIN(63);
```

```

+-----+
| BIN(63) |
+-----+
| 111111  |
+-----+

```

### 2. CURRENT\_USER()

It returns the user name and host name for the MySQL account that the server used to authenticate the current client.

Syntax: CURRENT\_USER()

```
select CURRENT_USER();
```

```

+-----+
| CURRENT_USER() |
+-----+
| root@localhost |
+-----+

```

### 3. DATABASE()

It returns the name of the current database.

Syntax: DATABASE()

```
select DATABASE();
```

```

+-----+
| DATABASE() |
+-----+
| dreamhome39 |
+-----+

```

### 4. IF()

It returns a value if a condition is TRUE, or another value if a condition is FALSE.

Syntax: IF(condition, value\_if\_true, value\_if\_false)

```
select IF(500<1000, "YES", "NO");
```

```
+-----+
| IF(500<1000, "YES", "NO") |
+-----+
| YES                        |
+-----+
```

5. VERSION()

It returns the current version of the MySQL database, as a string.

Syntax: VERSION()

```
select VERSION();
```

```
+-----+
| VERSION()      |
+-----+
| 10.9.4-MariaDB |
+-----+
```

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