



Day 19

MySQL Loops- (Part 2)

WHILE Statement





WHILE Statement in MySQL

- The **WHILE** loop is a loop statement that executes a block of code repeatedly as long as a condition is true.

WHILE statements can be only used within Stored Procedures.



General Syntax :

```
[begin_label:] WHILE search_condition DO  
statement_list  
END WHILE [end_label]
```

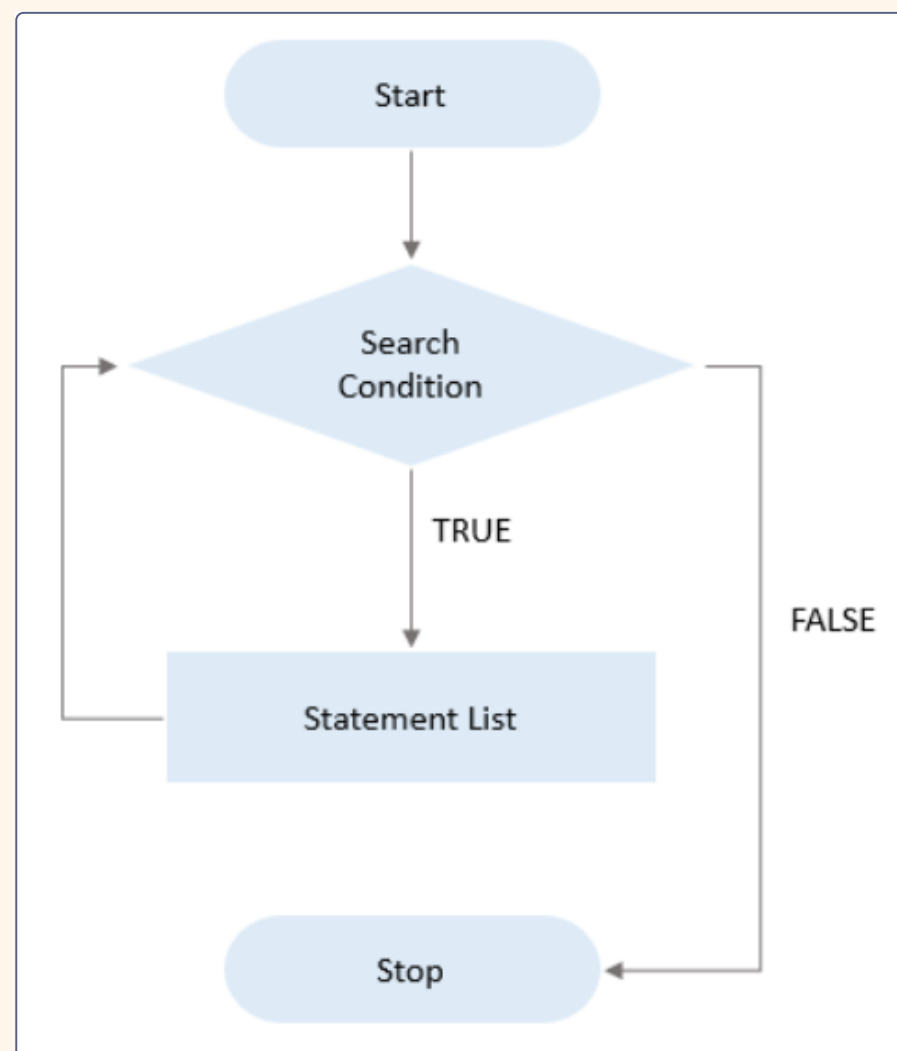


Key Points:

- The **WHILE** checks the search_condition at the beginning of each iteration.
 - If the search_condition evaluates to **TRUE**, the **WHILE** executes the statement_list as long as the search_condition is **TRUE**.
- The **WHILE** executes one or more statements that will execute between the **DO** and **END WHILE** keywords.



The following flowchart illustrates the MySQL WHILE loop statement:





Use Case Example :

Problem Statement: To print the first 10 multiples of any given number.

Query :

```
DELIMITER //
```

```
CREATE PROCEDURE getMultiples(  
    IN num int  
)  
BEGIN  
    DECLARE x INT;  
    DECLARE output VARCHAR(50);  
  
    SET x = 1;  
    SET output = "";  
  
    WHILE x<=10 DO  
        SET output = CONCAT(output,num*x,', ');  
        SET x = x + 1;  
    END WHILE;  
  
    SELECT output;  
END //
```

```
DELIMITER ;
```

1.input number = 7

```
CALL getMultiples(7);
```

Output :

	output
▶	7, 14, 21, 28, 35, 42, 49, 56, 63, 70,

2.input number = 89

```
CALL getMultiples(89);
```

Output :

	output
▶	89, 178, 267, 356, 445, 534, 623, 7...