

-- OLD TABLE

DROP TABLE IF EXISTS O_EmpId;

```
CREATE TABLE O_EmpId (  
    EmpId INT PRIMARY KEY,  
    EmpName VARCHAR(100)  
);
```

INSERT INTO O_EmpId VALUES (1,'Koushiki');

INSERT INTO O_EmpId VALUES (2,'Shweta');

INSERT INTO O_EmpId VALUES (3,'Srushti');

-- NEW TABLE

DROP TABLE IF EXISTS N_EmpId;

```
CREATE TABLE N_EmpId (  
    EmpId INT,  
    EmpName VARCHAR(100)  
);
```

-- LOG TABLE

DROP TABLE IF EXISTS Emp_Log;

```
CREATE TABLE Emp_Log (  
    msg VARCHAR(200)  
);
```

```
-- PROCEDURE

DELIMITER $$

DROP PROCEDURE IF EXISTS MergeEmployeeAdvanced $$

CREATE PROCEDURE MergeEmployeeAdvanced()

BEGIN

    DECLARE v_empid INT;

    DECLARE v_empname VARCHAR(100);

    DECLARE done INT DEFAULT 0;


    -- Cursor declaration

    DECLARE cur CURSOR FOR

        SELECT EmpId, EmpName FROM N_EmpId;


    -- NOT FOUND handler

    DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;


    -- EXIT handler for SQL exception

    DECLARE EXIT HANDLER FOR SQLEXCEPTION

    BEGIN

        INSERT INTO Emp_Log VALUES ('ERROR: SQL Exception occurred — Procedure aborted.');
```

RESIGNAL;

```
END;


    -- Create temp log table for this execution

    DROP TEMPORARY TABLE IF EXISTS temp_log;

    CREATE TEMPORARY TABLE temp_log(msg VARCHAR(200));
```

```
OPEN cur;
```

```
read_loop: LOOP
```

```
    FETCH cur INTO v_empid, v_empname;
```

```
    IF done = 1 THEN
```

```
        INSERT INTO temp_log VALUES ('Cursor finished reading.');
```

```
        LEAVE read_loop;
```

```
    END IF;
```

```
    -- CUSTOM ERROR: negative EmpId
```

```
    IF v_empid < 0 THEN
```

```
        SIGNAL SQLSTATE '45001'
```

```
        SET MESSAGE_TEXT = 'Employee ID cannot be negative!';
```

```
    END IF;
```

```
    -- Insert or skip duplicate
```

```
    IF NOT EXISTS (SELECT 1 FROM O_EmpId WHERE EmpId = v_empid) THEN
```

```
        INSERT INTO O_EmpId VALUES (v_empid, v_empname);
```

```
        INSERT INTO temp_log VALUES (CONCAT('Inserted: ', v_empname));
```

```
    ELSE
```

```
        INSERT INTO temp_log VALUES (CONCAT('Skipped duplicate: ', v_empname));
```

```
    END IF;
```

```
END LOOP;
```

```
CLOSE cur;

-- Move temp log messages into final log table
INSERT INTO Emp_Log SELECT * FROM temp_log;
DROP TEMPORARY TABLE temp_log;

END $$

DELIMITER ;


-- INSERT NEW RECORDS
INSERT INTO N_EmpId VALUES (2,'Shweta');
INSERT INTO N_EmpId VALUES (4,'Amit');
INSERT INTO N_EmpId VALUES (5,'Riya');


-- RUN PROCEDURE
CALL MergeEmployeeAdvanced();


-- VIEW OUTPUT
-- SELECT * FROM O_EmpId;
-- SELECT * FROM Emp_Log;
-- SELECT * FROM N_EmpId;
```