**Unit Testing Document**

Mainframe Tour Project

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**Mainframe ID:** OZA136  
Project Name: Mainframe Project on Tour

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**Program Name: OZA136.SUMANTH.PROJECT.COBOL(TOUR)**

## **Unit Test Cases**

### **Test Case ID: TC01**

**Test Case Description:** Verify the creation of the TOUR\_DETAILS table with correct column definitions.

**Input Data:**

CREATE TABLE TOUR\_DETAILS (

TOUR\_PLACE CHAR(15) NOT NULL PRIMARY KEY,

TOUR\_GUIDE CHAR(10),

LANGUAGE CHAR(3) NOT NULL

CHECK (LANGUAGE IN ('TAM', 'ENG')),

TOUR\_DATE DATE NOT NULL,

GROUP\_SIZE INTEGER NOT NULL,

PRICE\_PER\_HEAD INTEGER NOT NULL

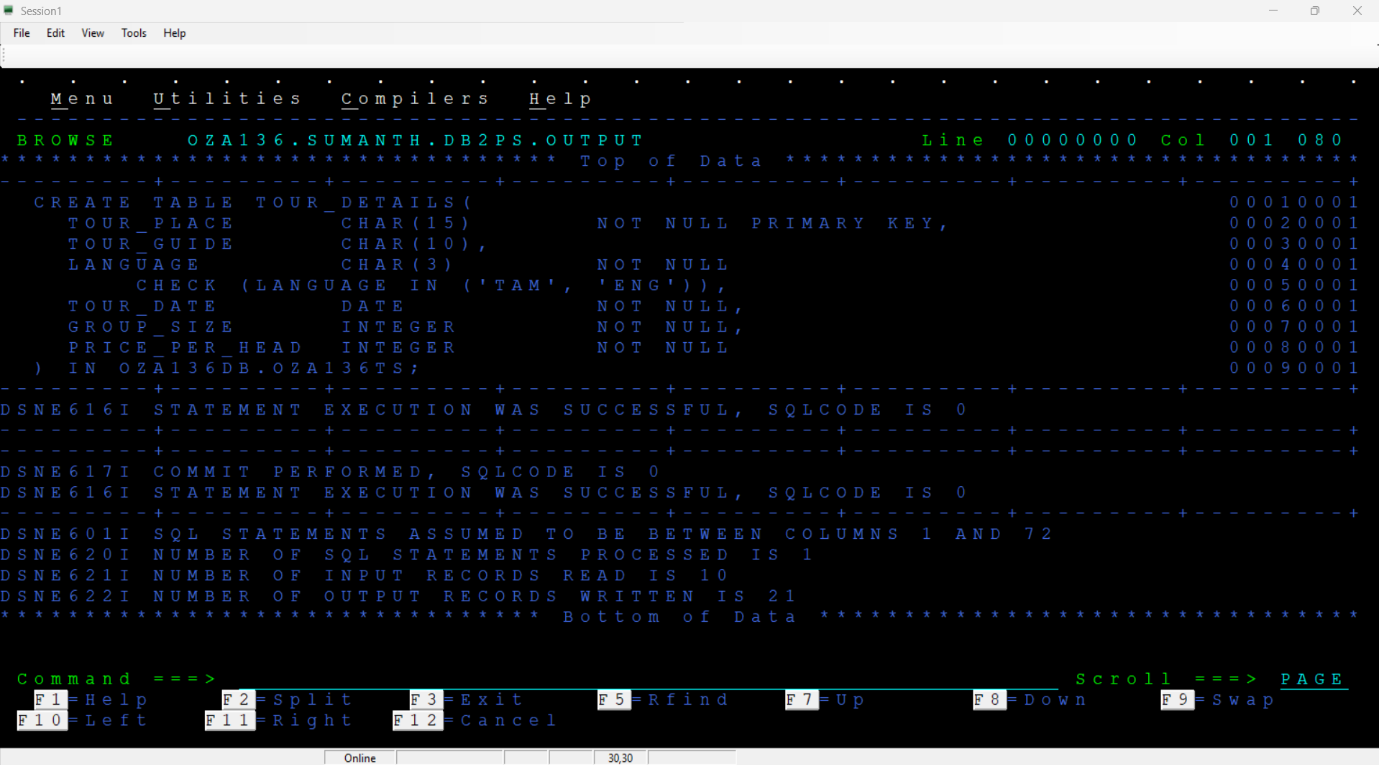
) IN OZA136DB.OZA136TS;

**Output Data:**

TOUR\_DETAILS table created with columns: TOUR\_PLACE, TOUR\_GUIDE, LANGUAGE, TOUR\_DATE, GROUP\_SIZE, PRICE\_PER\_HEAD.

**Conclusion: PASS**

The table was created successfully with the columns and data types.



### **Test Case ID: TC02**

**Test Case Description:** Verify the creation of the SEASON\_DISCOUNT table with correct column definitions.

**Input Data:**

CREATE TABLE SEASON\_DISCOUNT (

TOUR\_PLACE CHAR(15) NOT NULL PRIMARY KEY,

FINAL\_PRICE INTEGER NOT NULL,

GUIDE CHAR(10),

DISCOUNT INTEGER NOT NULL,

DATE DATE NOT NULL,

GROUP\_DISCOUNT INTEGER NOT NULL

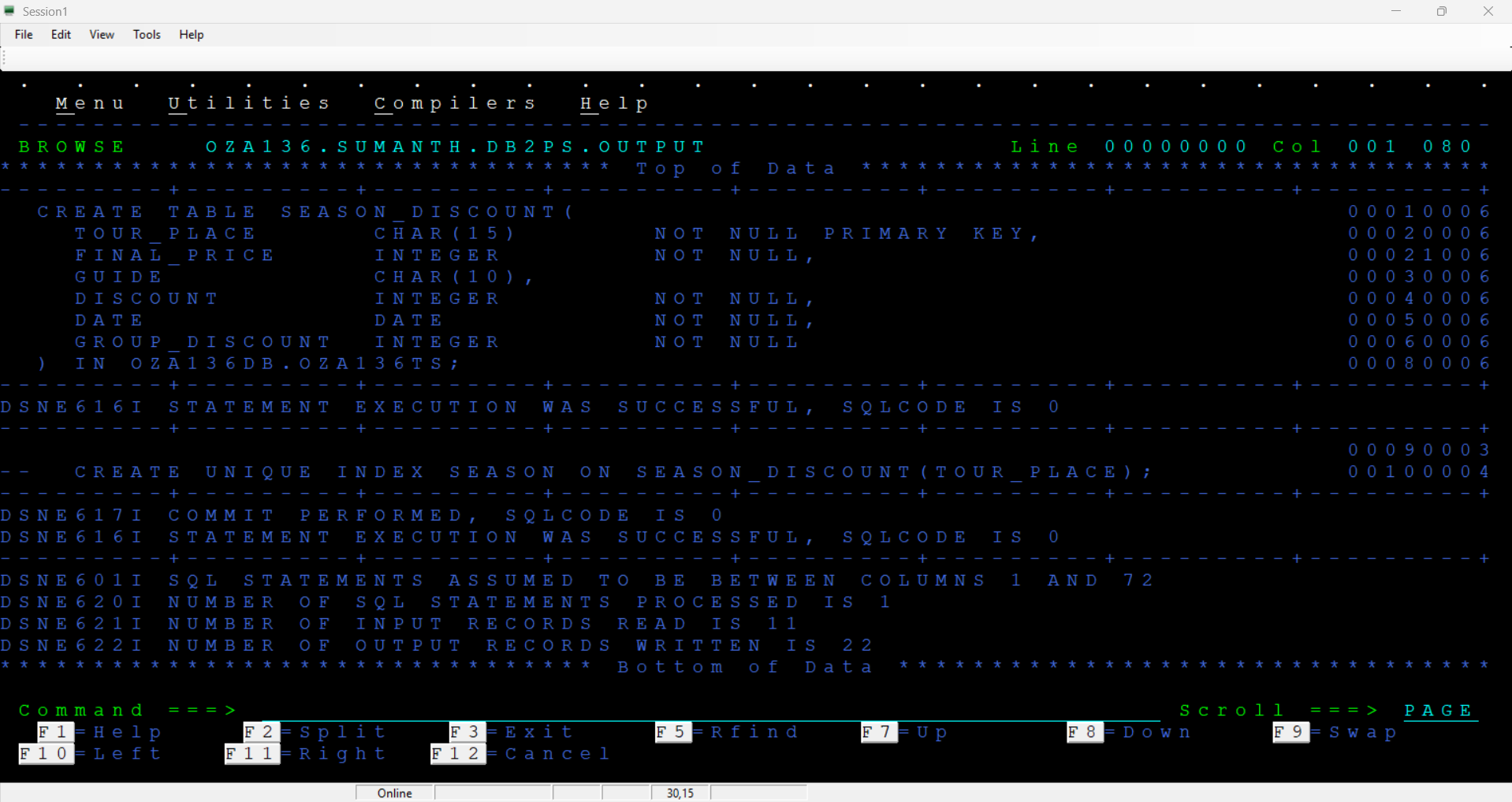
) IN OZA136DB.OZA136TS;

**Output Data:**

SEASON\_DISCOUNT table created with columns: TOUR\_PLACE, FINAL\_PRICE, GUIDE, DISCOUNT, DATE, GROUP\_DISCOUNT.

**Conclusion: PASS**

The table has created successfully with the specified columns and data types.



### **Test Case ID: TC03**

**Test Case Description:** Insert sample data into the TOUR\_DETAILS table.

**Input Data:**

INSERT INTO TOUR\_DETAILS VALUES

('PAMBANBRIDGE', 'HARI', 'TAM', '2014-09-30', 16, 2500);

INSERT INTO TOUR\_DETAILS VALUES

('MAHABALIPURAM', NULL, 'TAM', '2014-09-01', 2, 1500);

INSERT INTO TOUR\_DETAILS VALUES

('THENI', 'ARUL', 'ENG', '2014-09-02', 10, 2000);

INSERT INTO TOUR\_DETAILS VALUES

('KALLANAI DAM', 'MANI', 'TAM', '2014-09-20', 5, 1800);

INSERT INTO TOUR\_DETAILS VALUES

('VELLORFORT', NULL, 'ENG', '2014-09-01', 1, 1250);

INSERT INTO TOUR\_DETAILS VALUES

('MARINABEACH', 'ANNY', 'ENG', '2014-09-29', 18, 1000);

INSERT INTO TOUR\_DETAILS VALUES

('MADURAITEMPLE', 'PRIYA', 'TAM', '2014-09-18', 25, 2680);

INSERT INTO TOUR\_DETAILS VALUES

('KOVALAM', 'SRUTHI', 'ENG', '2014-09-21', 22, 2500);

INSERT INTO TOUR\_DETAILS VALUES

('METTUR DAM', 'RUPA', 'TAM', '2014-09-21', 21, 2200);

**Output Data:**

TOUR\_DETAILS contains:

('PAMBANBRIDGE', 'HARI', 'TAM', '2014-09-30', 16, 2500)

('MAHABALIPURAM', NULL, 'TAM', '2014-09-01', 2, 1500)

('THENI', 'ARUL', 'ENG', '2014-09-02', 10, 2000)

('KALLANAI DAM', 'MANI', 'TAM', '2014-09-20', 5, 1800)

('VELLORFORT', NULL, 'ENG', '2014-09-01', 1, 1250)

('MARINABEACH', 'ANNY', 'ENG', '2014-09-29', 18, 1000)

('MADURAITEMPLE', 'PRIYA', 'TAM', '2014-09-18', 25, 2680)

('KOVALAM', 'SRUTHI', 'ENG', '2014-09-21', 22, 2500)

('METTUR DAM', 'RUPA', 'TAM', '2014-09-21', 21, 2200)

**Conclusion: PASS**

All sample records were inserted successfully into the TOUR\_DETAILS table.



### **Test Case ID: TC04**

**Test Case Description:** Handle records where the TOUR\_GUIDE field contains NULL values.

**Input Data:**

Records in TOUR\_DETAILS with NULL TOUR\_GUIDE:

* MAHABALIPURAM, NULL, TAM, 2014-09-01, 2, 1500
* VELLORE FORT, NULL, ENG, 2014-09-01, 1, 1250

Cursor filter: GROUP\_SIZE > 1 AND PRICE\_PER\_HEAD > 1000



**Output Data:**

OUTODEL:

**MAHABALIPURAM YTD TAM 2014-09-01 02 01500**

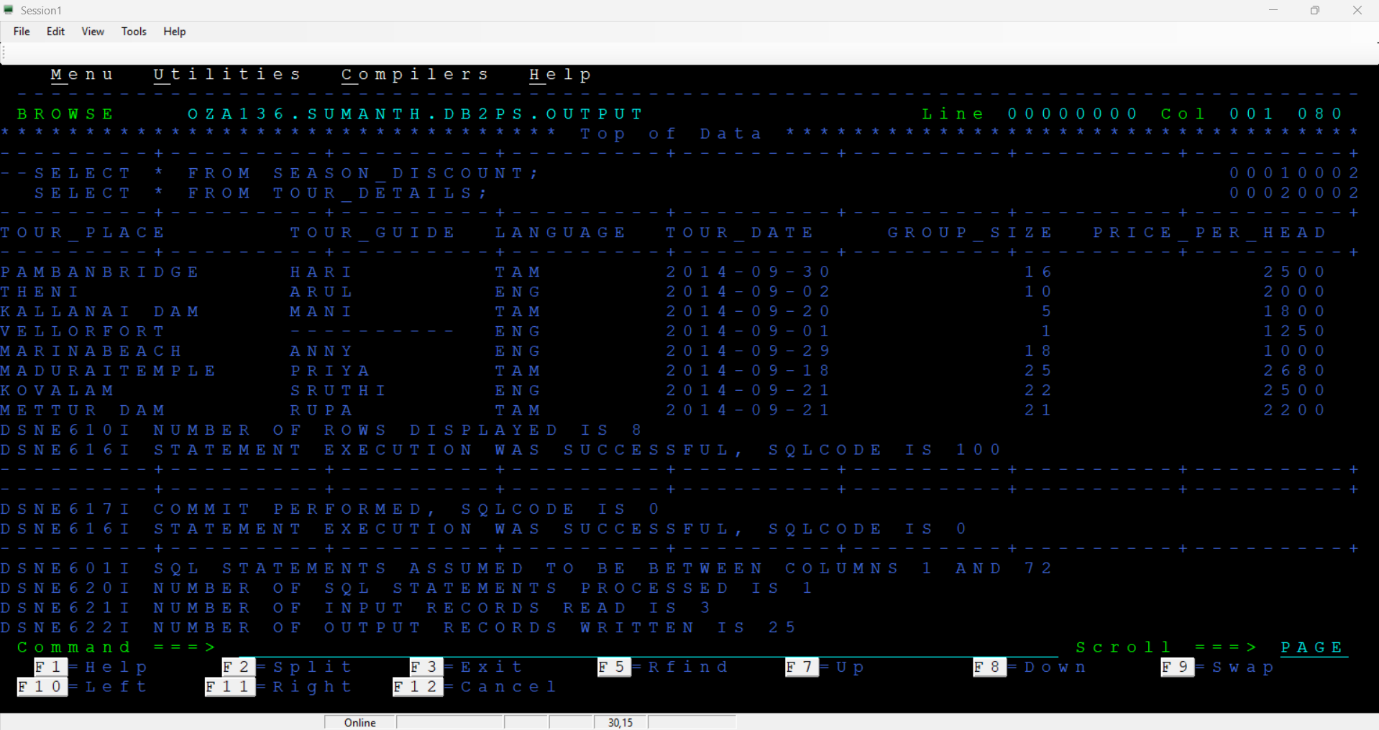
TOUR\_DETAILS table after processing:

* MAHABALIPURAM record deleted (TOUR\_GUIDE is NULL).
* VELLORE FORT not processed (does not meet cursor criteria: GROUP\_SIZE = 1).

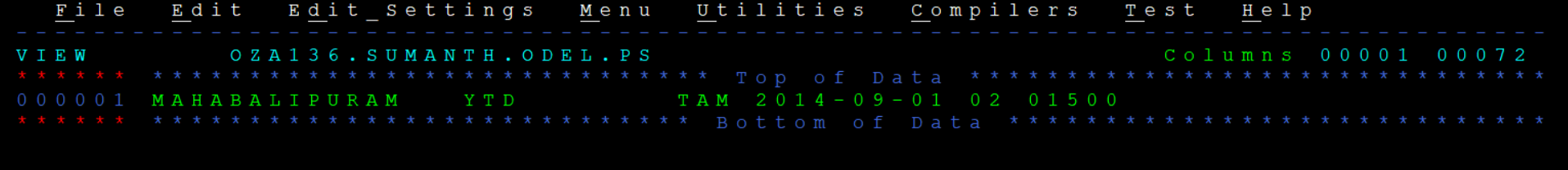
**Conclusion: PASS**

Records with NULL TOUR\_GUIDE were processed as expected: written to OUTODEL and deleted from TOUR\_DETAILS.

TOUR\_DETAILS Table:



OUTODEL file:



### **Test Case ID: TC05**

**Test Case Description:** Compute the discount for GROUP\_SIZE = 5.

**Input Data:**

Record: KALLANAI DAM, MANI, TAM, 2014-09-20, 5, 1800

Formula: DISCOUNT = PRICE\_PER\_HEAD \* 0.01

Expected: DISCOUNT = 1800 \* 0.01 = 18



**Output Data:**

Calculated DISCOUNT: 18

OUTTOUR record:

**KALLANAI DAM 0001700 MANI 000000018 2014-09-20 000000090 05**

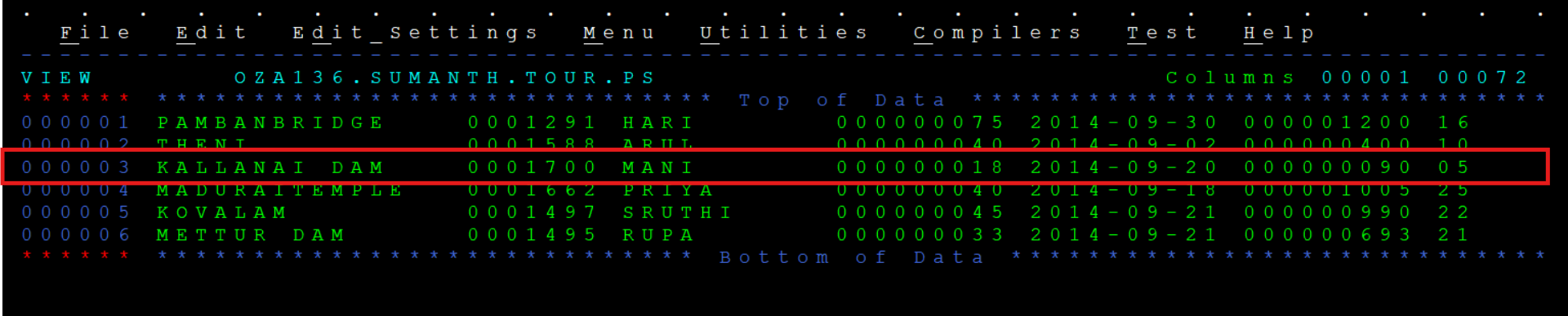
GROUP\_DISCOUNT (DISCOUNT \* GROUP\_SIZE): 18 \* 5 = 90

FINAL\_PRICE (DISCOUNT between 10 and 20): 1800 - 90 - 10 = 1700

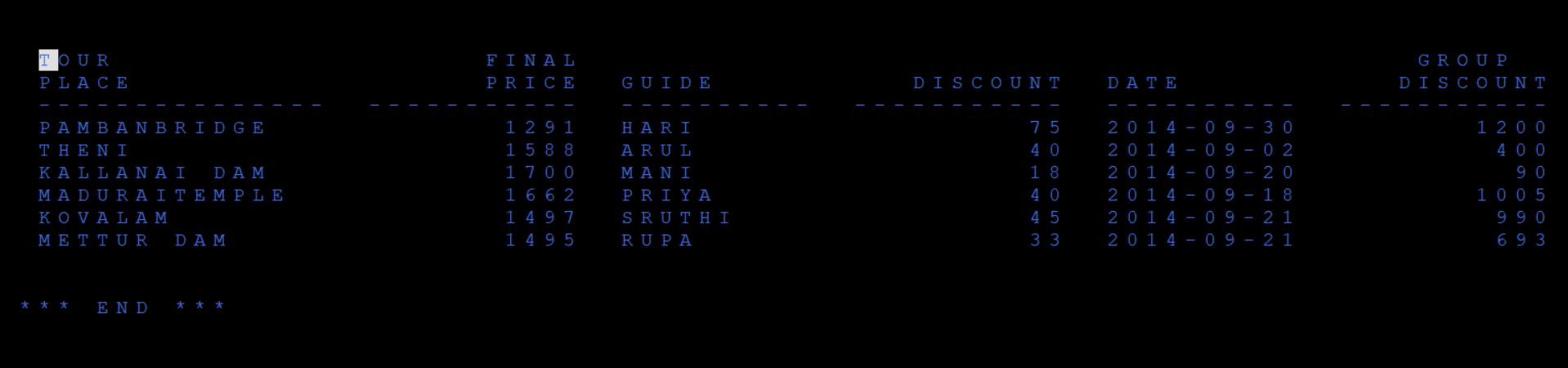
**Conclusion: PASS**

Discount calculated correctly for GROUP\_SIZE = 5.

OUTTOUR file:



SEASON\_DISCOUNT Table:



### **Test Case ID: TC06**

**Test Case Description:** Compute the discount for GROUP\_SIZE between 6 and 10, filtering by LANGUAGE = "ENG".

**Input Data:**

Record: THENI, ARUL, ENG, 2014-09-02, 10, 2000

Formula: DISCOUNT = PRICE\_PER\_HEAD \* 0.02

Expected: DISCOUNT = 2000 \* 0.02 = 40



**Output Data:**

Calculated DISCOUNT: 40

OUTTOUR record:

**THENI 0001588 ARUL 000000040 2014-09-02 000000400 10**

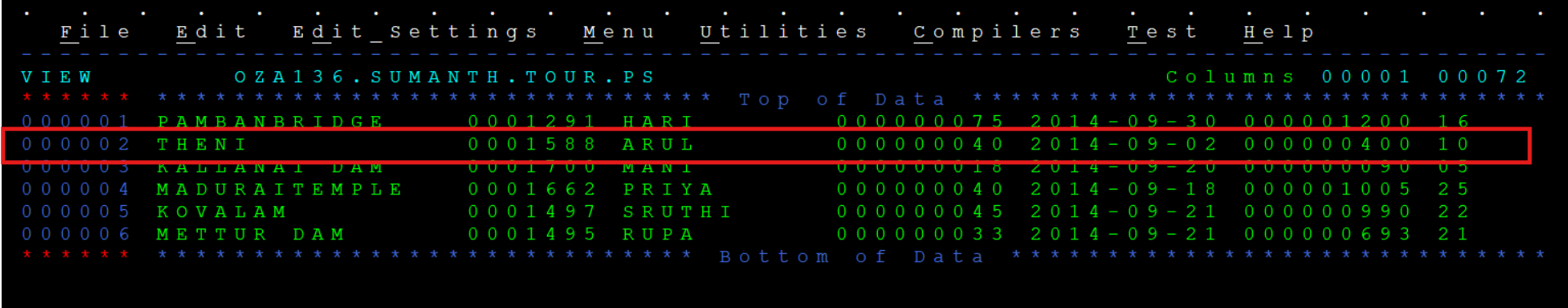
GROUP\_DISCOUNT: 40 \* 10 = 400

FINAL\_PRICE (DISCOUNT between 21 and 40): 2000 - 400 - 12 = 1588

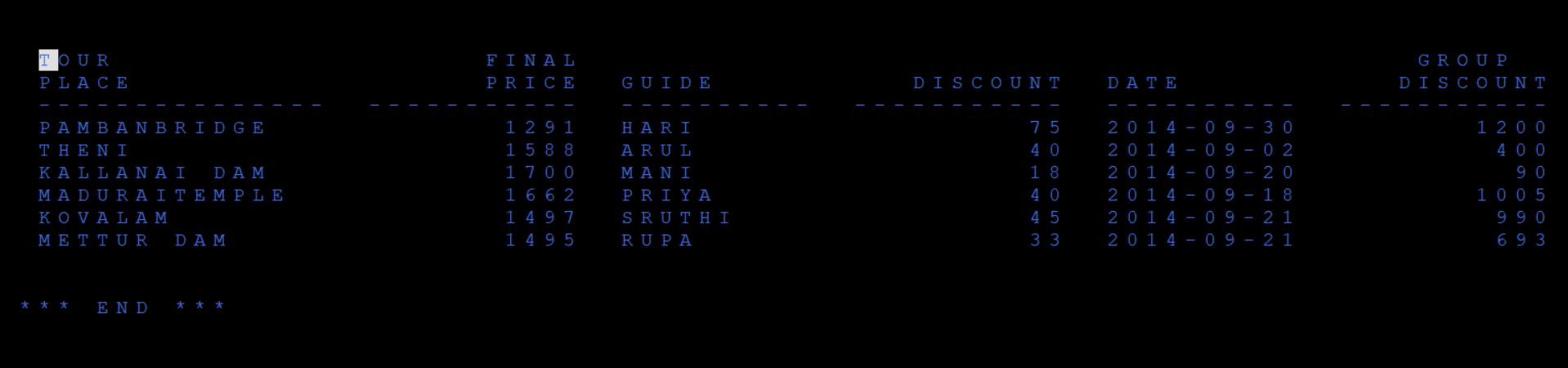
**Conclusion: PASS**

Discount calculated correctly for GROUP\_SIZE between 6 and 10 with LANGUAGE = "ENG".

OUTTOUR file:



SEASON\_DISCOUNT Table:



### **Test Case ID: TC07**

**Test Case Description:** Determine the FINAL\_PRICE for discounts ranging between 41 and 50.

**Input Data:**

Record: KOVALAM, SRUTHI, ENG, 2014-09-21, 22, 2500

DISCOUNT: 45

GROUP\_DISCOUNT: 45 \* 22 = 990

Formula: FINAL\_PRICE = PRICE\_PER\_HEAD - GROUP\_DISCOUNT - 13

Expected: FINAL\_PRICE = 2500 - 990 - 13 = 1497



**Output Data:**

Calculated FINAL\_PRICE: 1497

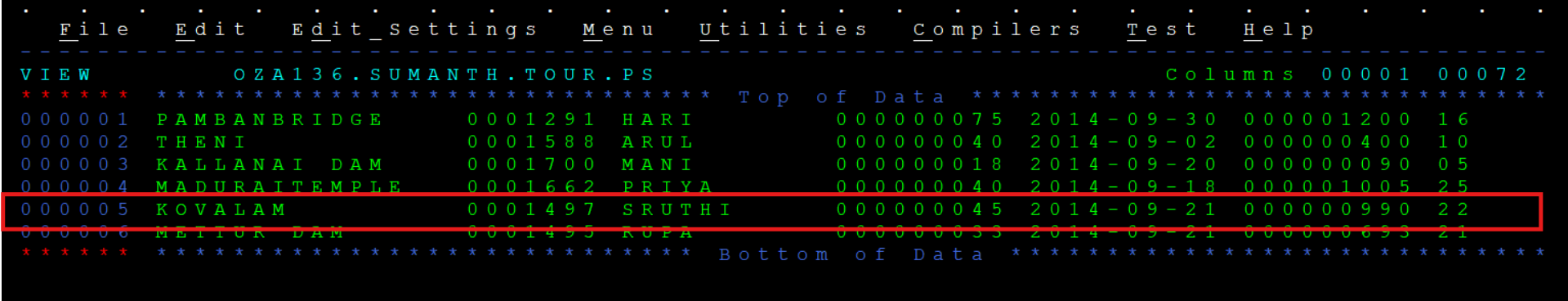
OUTTOUR record:

**KOVALAM 0001497 SRUTHI 000000045 2014-09-21 000000990 22**

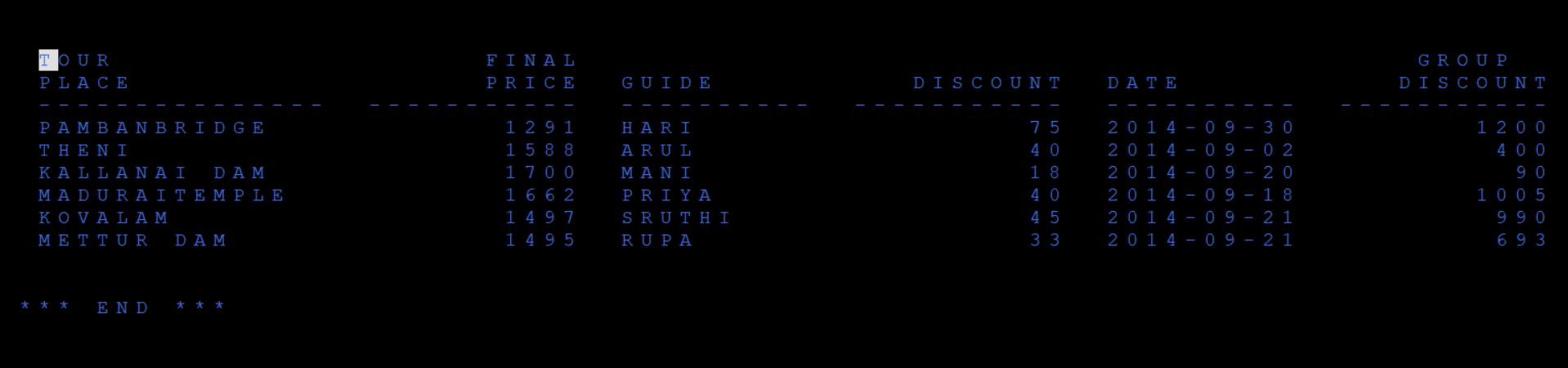
**Conclusion: PASS**

FINAL\_PRICE calculated correctly for DISCOUNT between 41 and 50.

OUTTOUR file:



SEASON\_DISCOUNT Table:



### **Test Case ID: TC08**

**Test Case Description:** Determine the FINAL\_PRICE for discounts ranging between 51 and 99.

**Input Data:**

Record: PAMBAN BRIDGE, HARI, TAM, 2014-09-30, 16, 2500

DISCOUNT: 75

GROUP\_DISCOUNT: 75 \* 16 = 1200

Formula: FINAL\_PRICE = PRICE\_PER\_HEAD - GROUP\_DISCOUNT - 9

Expected: FINAL\_PRICE = 2500 - 1200 - 9 = 1291



**Output Data:**

Calculated FINAL\_PRICE: 1291

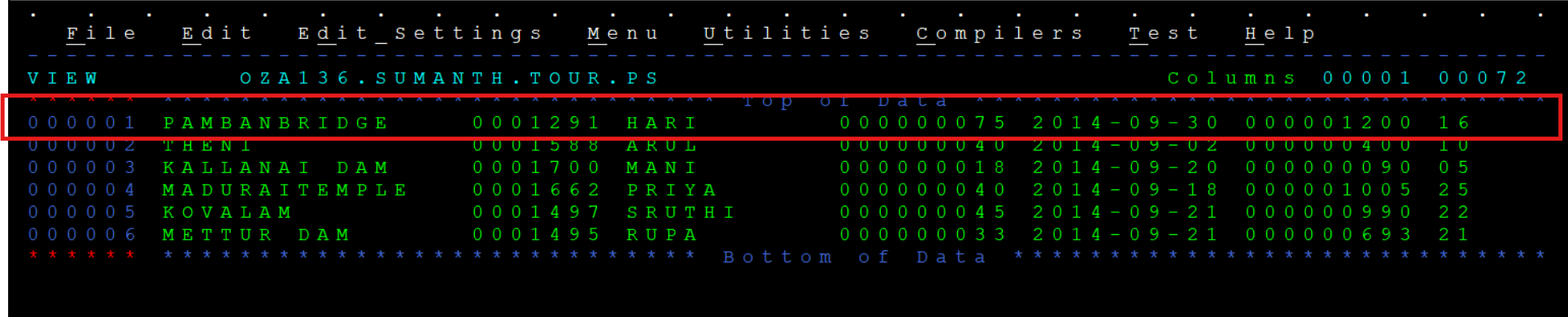
OUTTOUR record:

**PAMBAN BRIDGE 0001291 HARI 000000075 2014-09-30 000001200 16**

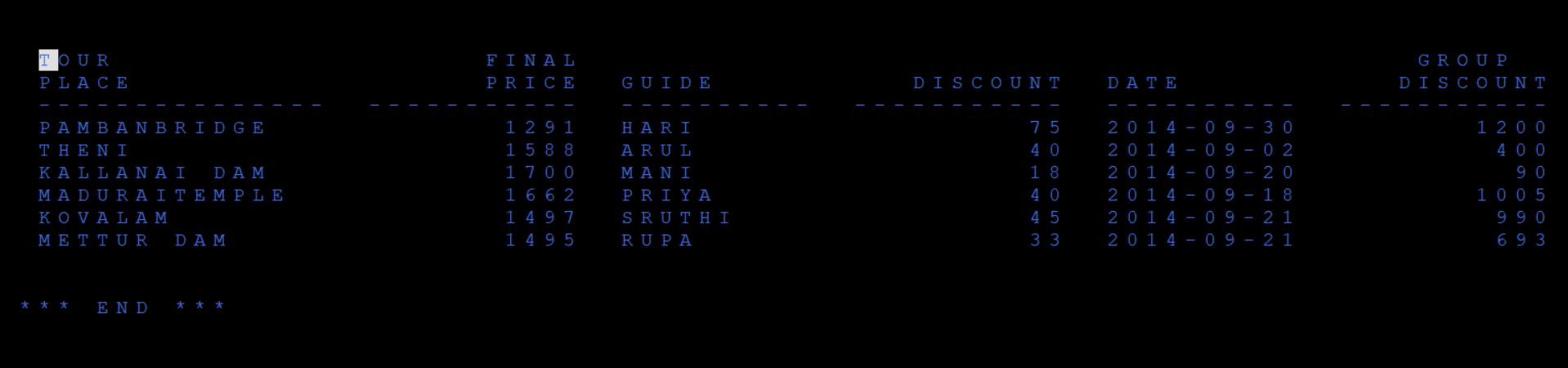
**Conclusion: PASS**

FINAL\_PRICE calculated correctly for DISCOUNT between 51 and 99.

OUTTOUR file:



SEASON\_DISCOUNT Table:



## **Version History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Changes Made** |
| 1.0 | 19-03-2025 | Sumanth Kumar Reddy | Initial draft created. |
| 1.1 | 20-03-2025 | Sumanth Kumar Reddy | Added test cases, result and screenshots. |
| 1.2 | 20-03-2025 | Pranchan Biswas | Signed-off and final review. |