

```
CREATE TABLE Airport (
    Airport_Code VARCHAR2(10) PRIMARY KEY,
    Airport_Name VARCHAR2(255),
    Airport_State VARCHAR2(50),
    Airport_City VARCHAR2(50)
);
```

```
CREATE TABLE Airplane (
    Registration_Number VARCHAR2(20) PRIMARY KEY,
    manufacturing_company VARCHAR2(255),
    seats_number NUMBER(3)
);
```

```
CREATE TABLE Administrator (
    Admin_ID NUMBER (5) PRIMARY KEY,
    Username VARCHAR2(50),
    Password VARCHAR2(50)
);
```

```
CREATE TABLE Passenger (
    SSN VARCHAR2(5) PRIMARY KEY,
    First_Name VARCHAR2(50),
    Second_Name VARCHAR2(50),
    Address VARCHAR2(255),
    Email VARCHAR2(50),
    Password VARCHAR2(50)
```

);

```
CREATE TABLE Flight (
    Flight_NO NUMBER(20) PRIMARY KEY,
    Departure_Time VARCHAR2(50),
    Arrival_Time VARCHAR2(50),
    Departure_Date VARCHAR2(50),
    Arrival_Date VARCHAR2(50),
    Airplane_ID VARCHAR2(20),
    Admin_ID NUMBER(7),
    FOREIGN KEY (Airplane_ID) REFERENCES Airplane (Registration_Number),
    FOREIGN KEY (Admin_ID) REFERENCES Administrator (Admin_ID)
);
```

```
CREATE TABLE Ticket (
    Ticket_ID NUMBER (10) PRIMARY KEY,
    Flight_ID NUMBER(20),
    Ticket_Status VARCHAR2(50),
    Price NUMBER(10, 2),
    Seat_No NUMBER(3),
    Passenger_ID VARCHAR2(5),
    FOREIGN KEY (Flight_ID) REFERENCES Flight (Flight_NO),
    FOREIGN KEY (Passenger_ID) REFERENCES Passenger (SSN)
);
```

```
CREATE TABLE Payment (
```

```
Payment_Number NUMBER(6) PRIMARY KEY,  
Amount NUMBER(10, 2),  
Payment_method VARCHAR2(50),  
Payment_Date VARCHAR2(50),  
Passenger_ID VARCHAR2(5),  
FOREIGN KEY (Passenger_ID) REFERENCES Passenger (SSN)  
);
```

```
CREATE TABLE Landing (  
Airplane_ID VARCHAR2(20) PRIMARY KEY,  
Airport_ID VARCHAR2(10),  
Landing_Time VARCHAR2(50),  
Landing_Date VARCHAR2(50),  
FOREIGN KEY (Airplane_ID) REFERENCES Airplane (Registration_Number),  
FOREIGN KEY (Airport_ID) REFERENCES Airport (Airport_Code)  
);
```

```
CREATE TABLE PhoneNumber (  
Phone_Number VARCHAR2(12) PRIMARY KEY,  
Passenger_SSN VARCHAR2(5),  
FOREIGN KEY (Passenger_SSN) REFERENCES Passenger (SSN)  
);
```

-- Insert statements

```
INSERT INTO Airport VALUES ('LAX', 'Los Angeles International Airport', 'CA', 'Los  
Angeles');
```

```
INSERT INTO Airport VALUES ('JFK', 'John F. Kennedy International Airport', 'NY',  
'New York');
```

```
INSERT INTO Airport VALUES ('ORD', 'Hare International Airport', 'IL', 'Chicago');
```

```
INSERT INTO Airplane VALUES ('ABC123', 'Airline A', 150);
```

```
INSERT INTO Airplane VALUES ('XYZ789', 'Airline B', 200);
```

```
INSERT INTO Airplane VALUES ('DEF456', 'Airline C', 180);
```

```
INSERT INTO Administrator VALUES (1, 'admin1', 'adminpass1');
```

```
INSERT INTO Administrator VALUES (2, 'admin2', 'adminpass2');
```

```
INSERT INTO Administrator VALUES (3, 'admin3', 'adminpass3');
```

```
INSERT INTO Passenger VALUES ('12345', 'John', 'Doe', '123 Main St',  
'john@email.com', 'pass123');
```

```
INSERT INTO Passenger VALUES ('54321', 'Jane', 'Smith', '456 Oak St',  
'jane@email.com', 'pass456');
```

```
INSERT INTO Passenger VALUES ('55555', 'Bob', 'Johnson', '789 Pine St',  
'bob@email.com', 'pass789');
```

```
INSERT INTO Flight VALUES ('123', '12:00:00', '11:00:00', '2023-01-01', '2023-02-  
01', 'ABC123', 1);
```

```
INSERT INTO Flight VALUES ('567', '12:00:00', '07:00:00', '2023-01-05', '2023-02-  
05', 'XYZ789', 3);
```

```
INSERT INTO Flight VALUES ('888', '06:30:00', '12:00:00', '2023-05-01', '2023-05-  
01', 'DEF456', 2);
```

```
INSERT INTO Ticket VALUES (1, '123', 'Booked', 150.00, 10, '12345');
```

```
INSERT INTO Ticket VALUES (2, '567', 'Confirmed', 200.00, 15, '54321');
```

```
INSERT INTO Ticket VALUES (3, '888', 'Pending', 180.00, 20, '55555');

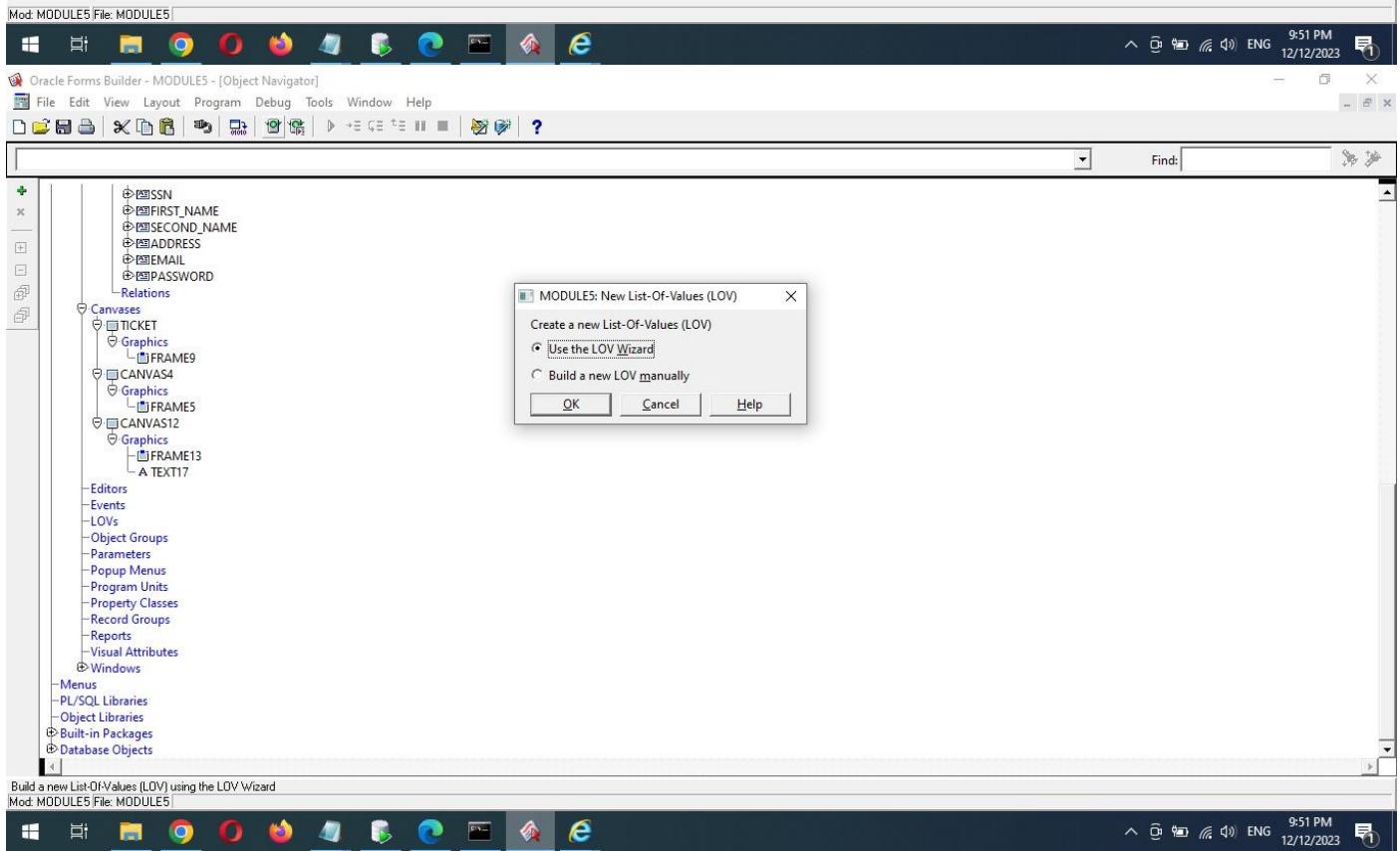
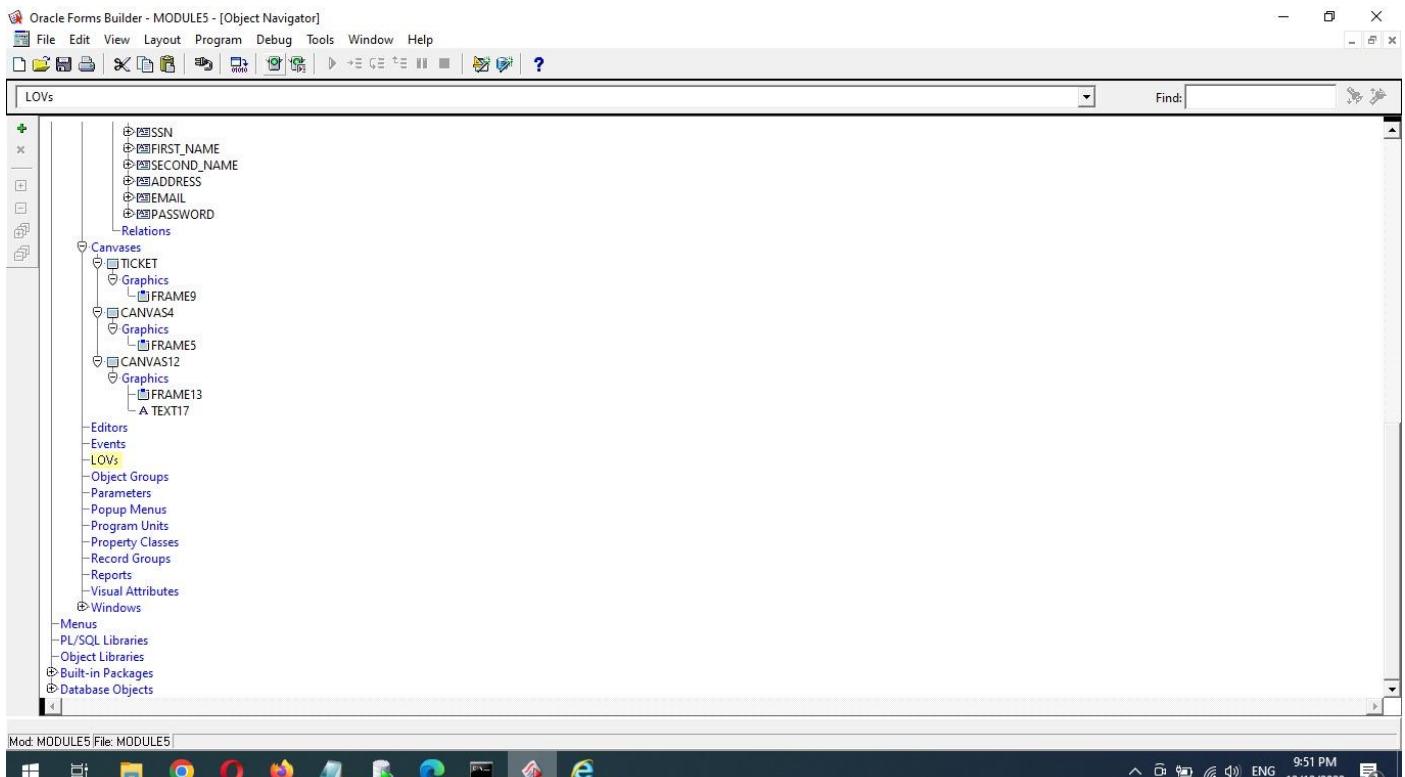
INSERT INTO Payment VALUES (1, 150.00, 'Credit Card', '2023-01-02', '12345');
INSERT INTO Payment VALUES (2, 200.00, 'PayPal', '2023-02-02', '54321');
INSERT INTO Payment VALUES (3, 180.00, 'Debit Card', '2023-03-02', '55555');

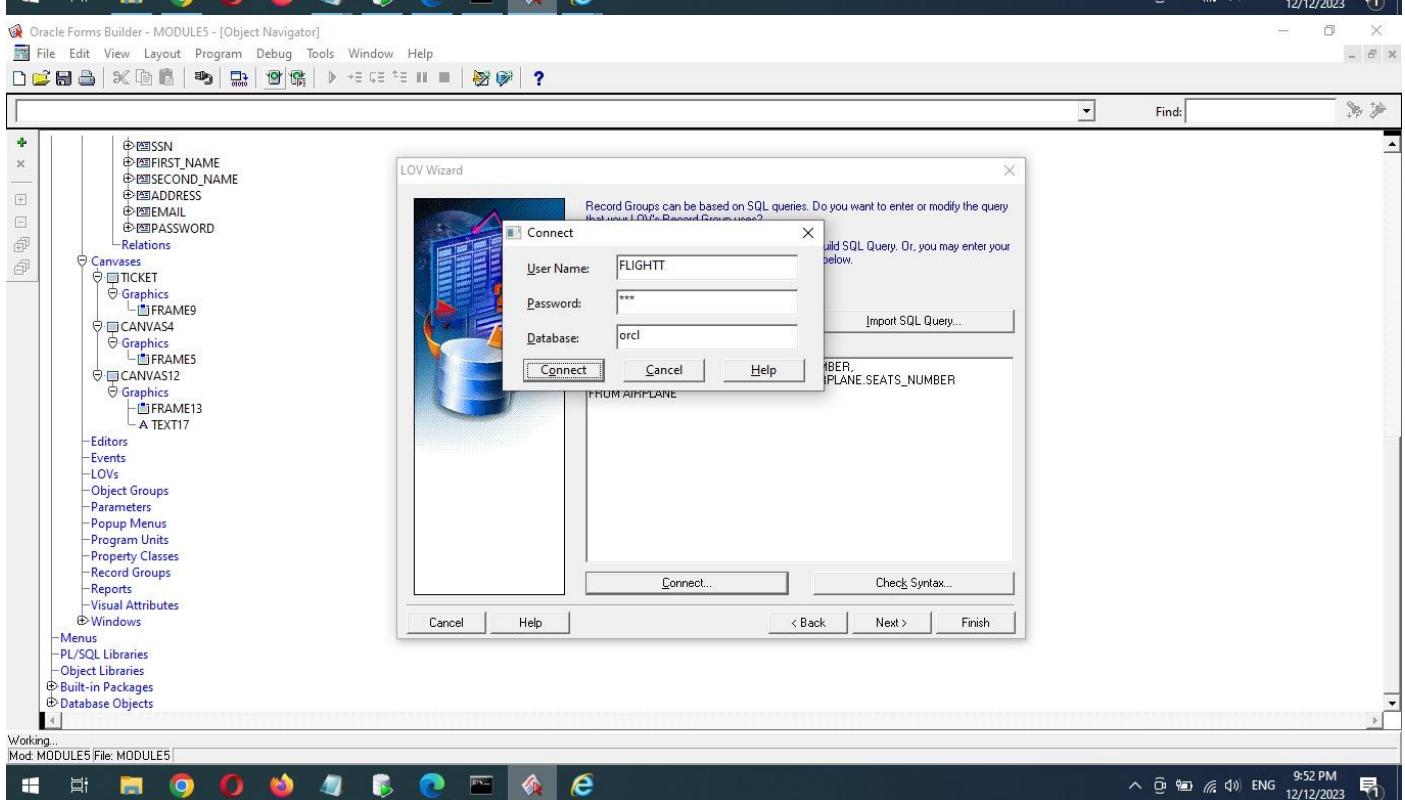
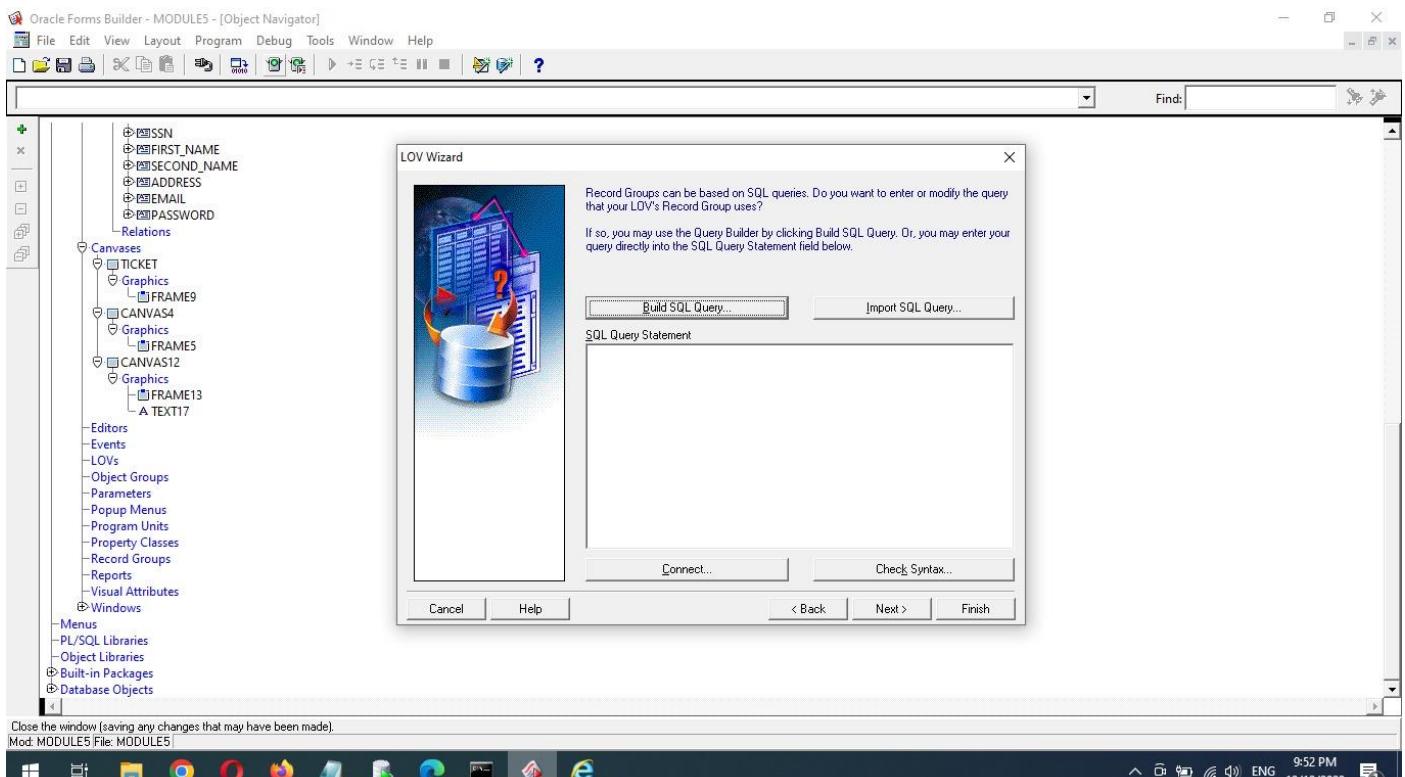
INSERT INTO Landing VALUES ('ABC123', 'LAX', '12:30:00', '2023-06-08');
INSERT INTO Landing VALUES ('XYZ789', 'JFK', '09:30:00', '2023-06-06');
INSERT INTO Landing VALUES ('DEF456', 'ORD', '07:30:00', '2023-12-08');

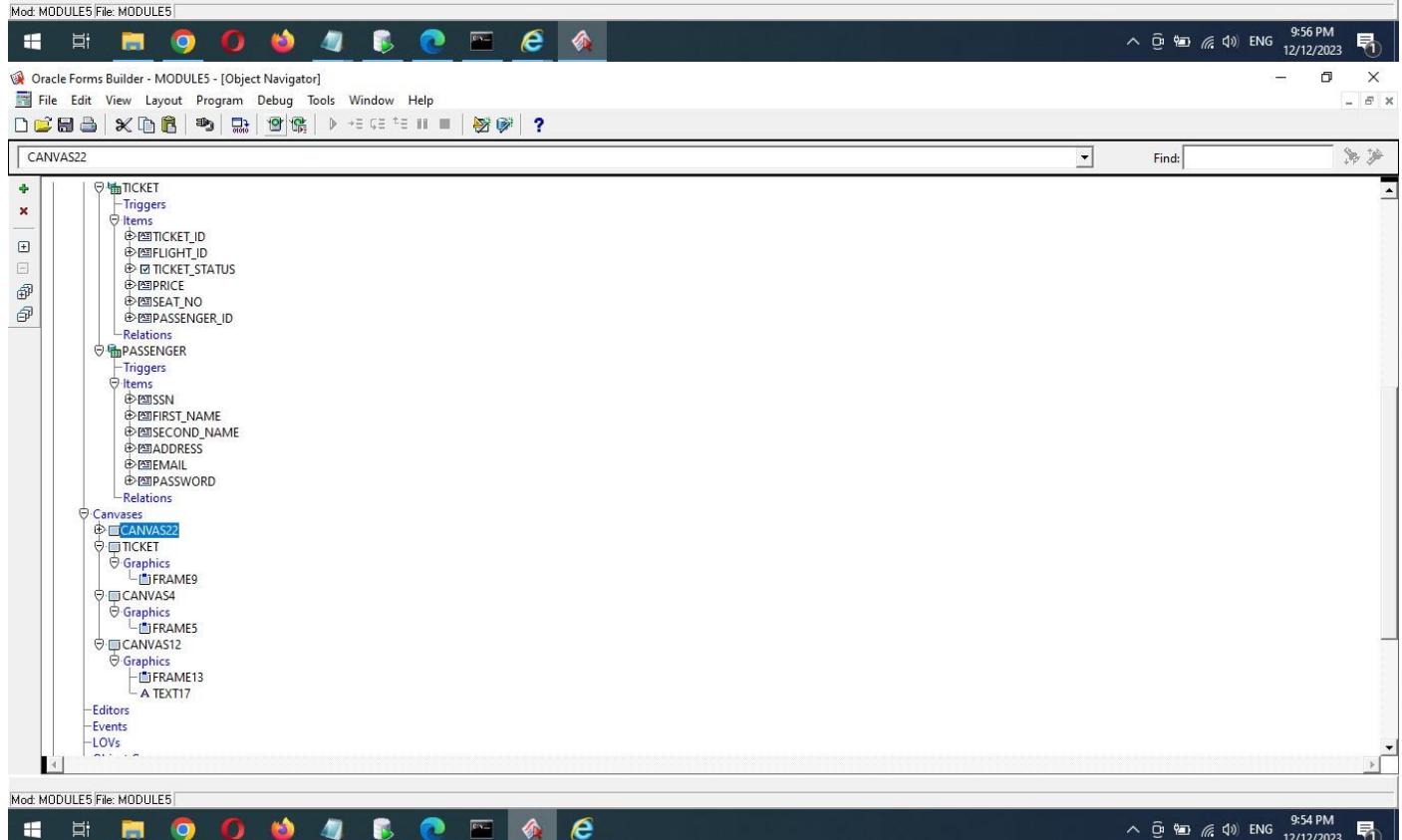
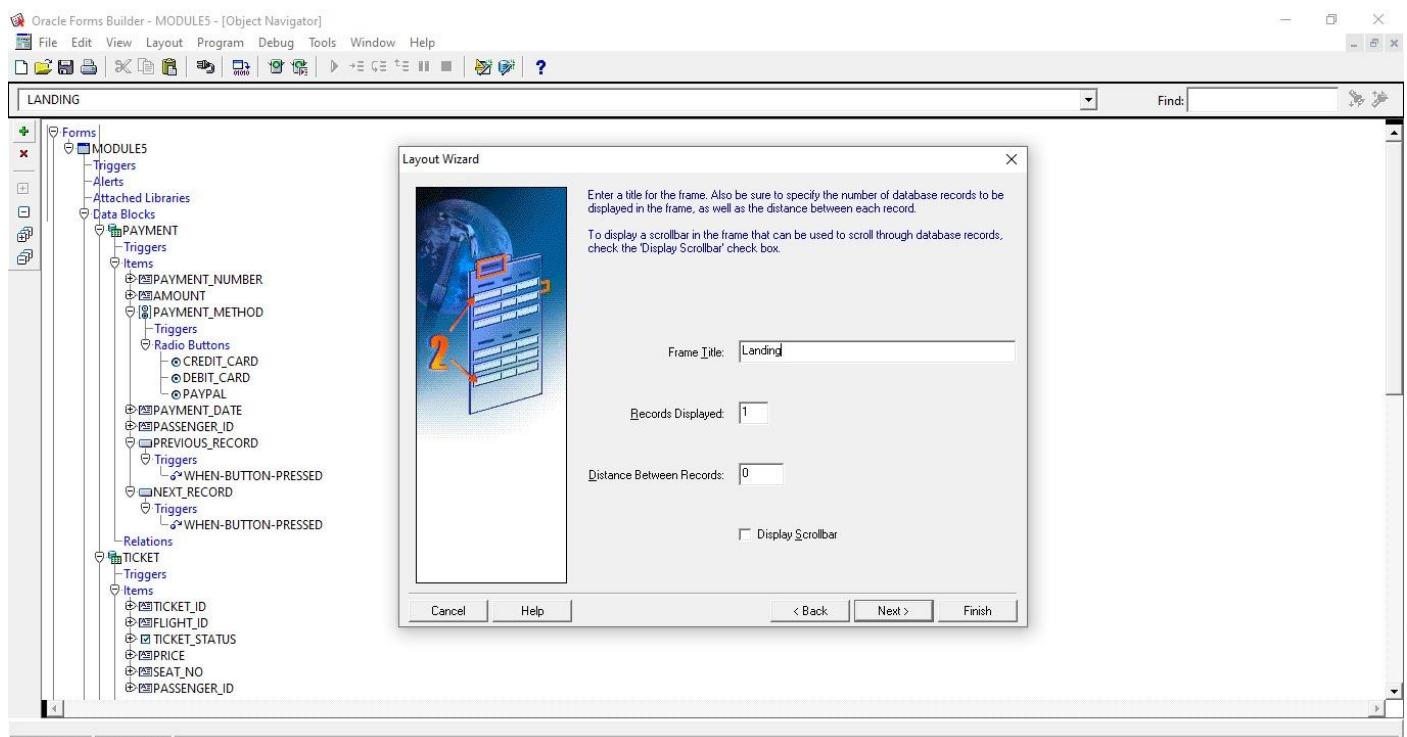
INSERT INTO PhoneNumber VALUES ('0120078865', '12345');
INSERT INTO PhoneNumber VALUES ('01577589945', '54321');
INSERT INTO PhoneNumber VALUES ('01933678845', '55555');

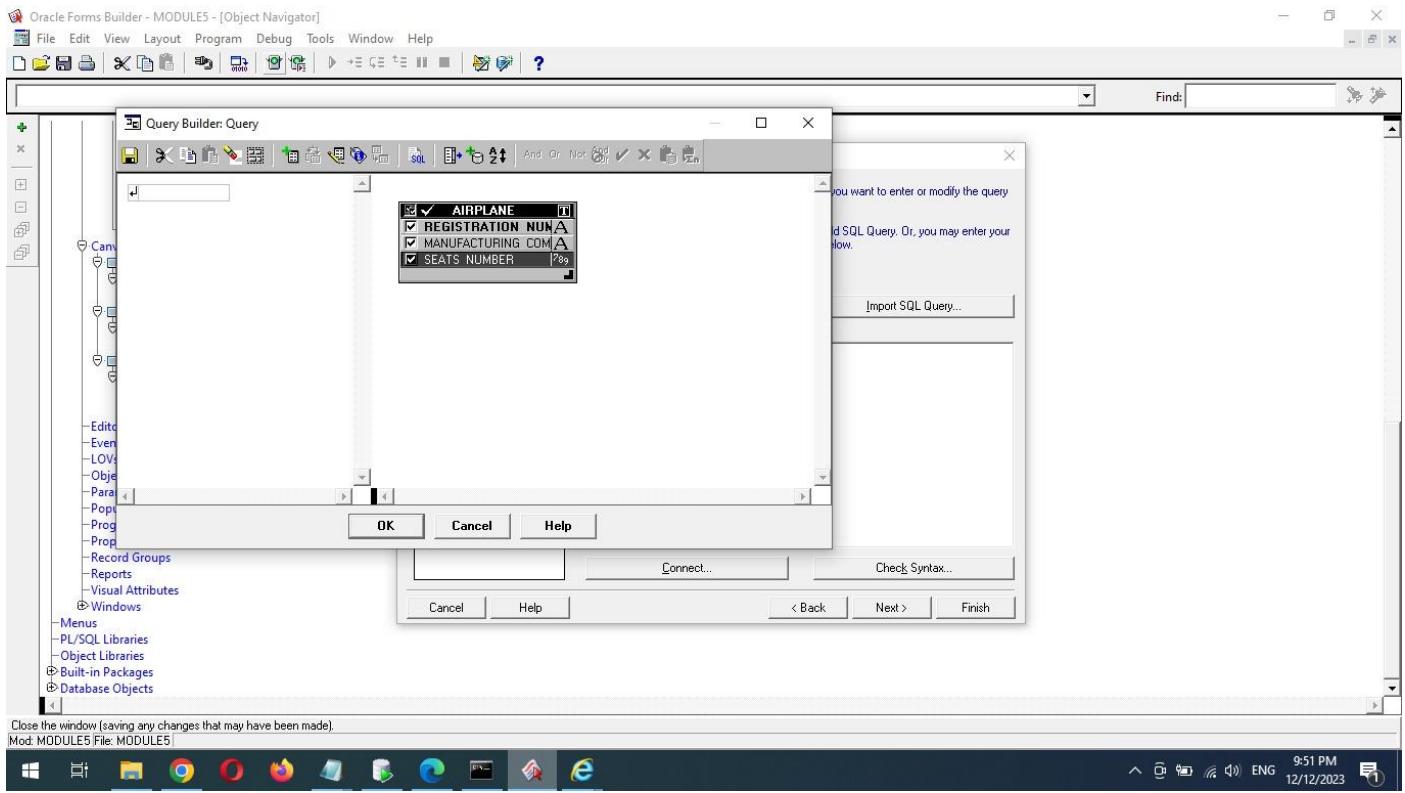
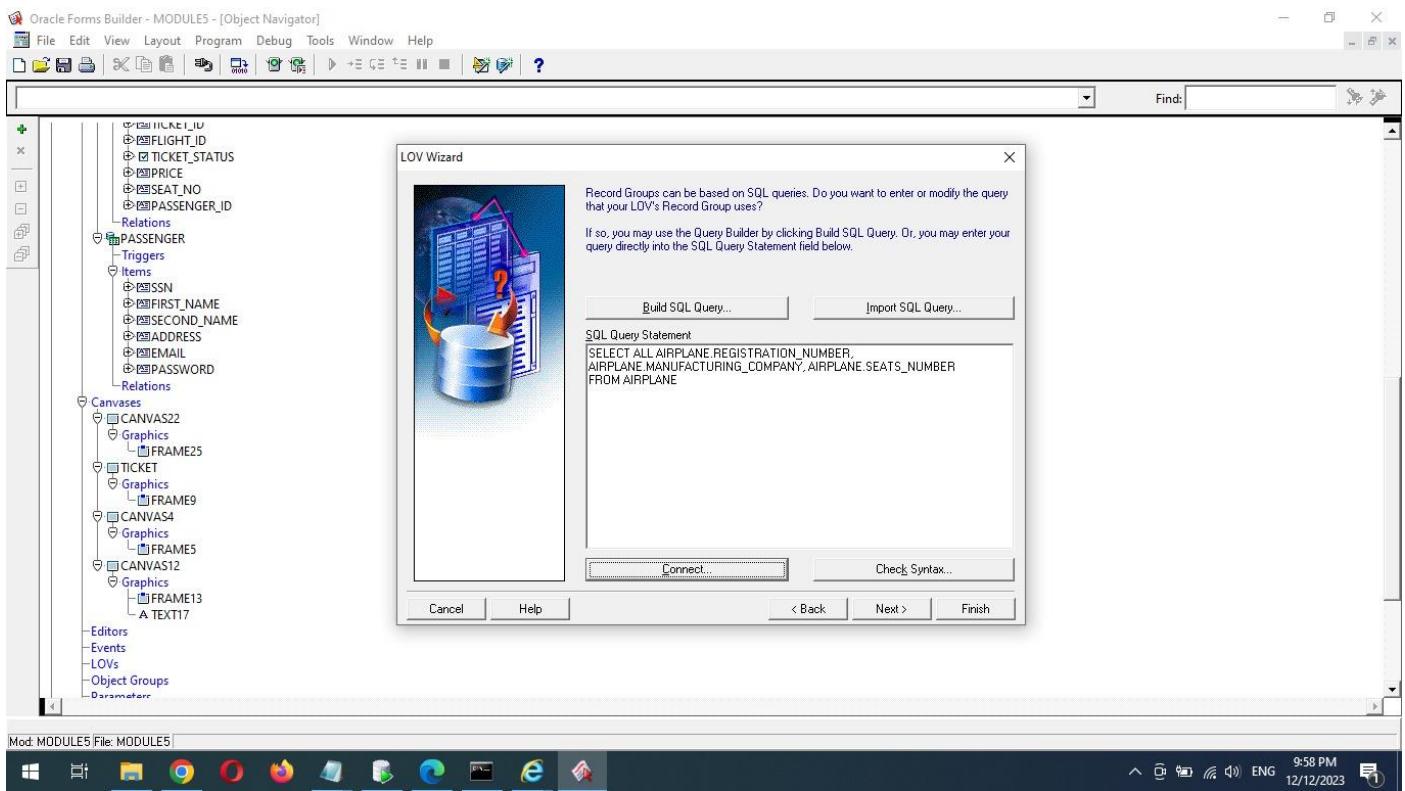
commit
```

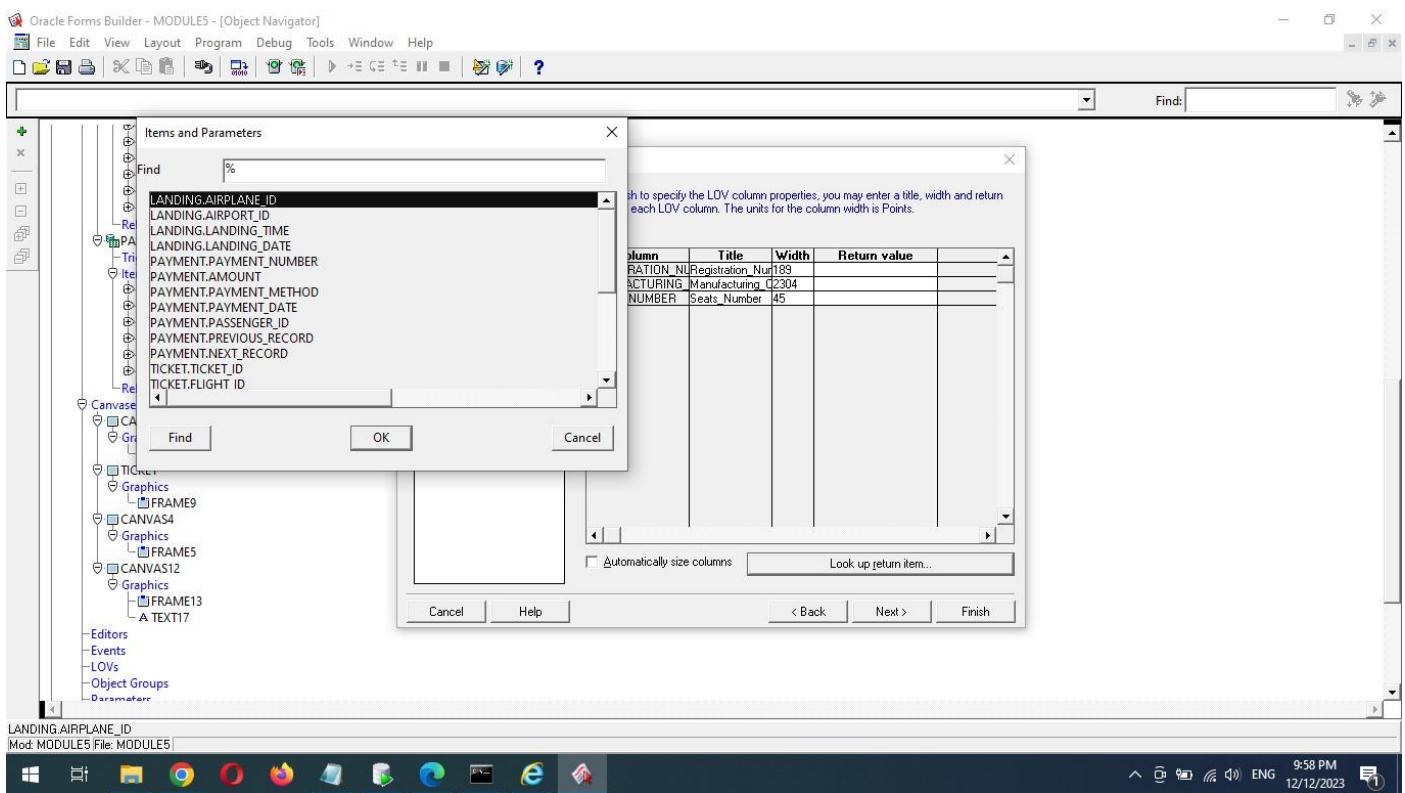
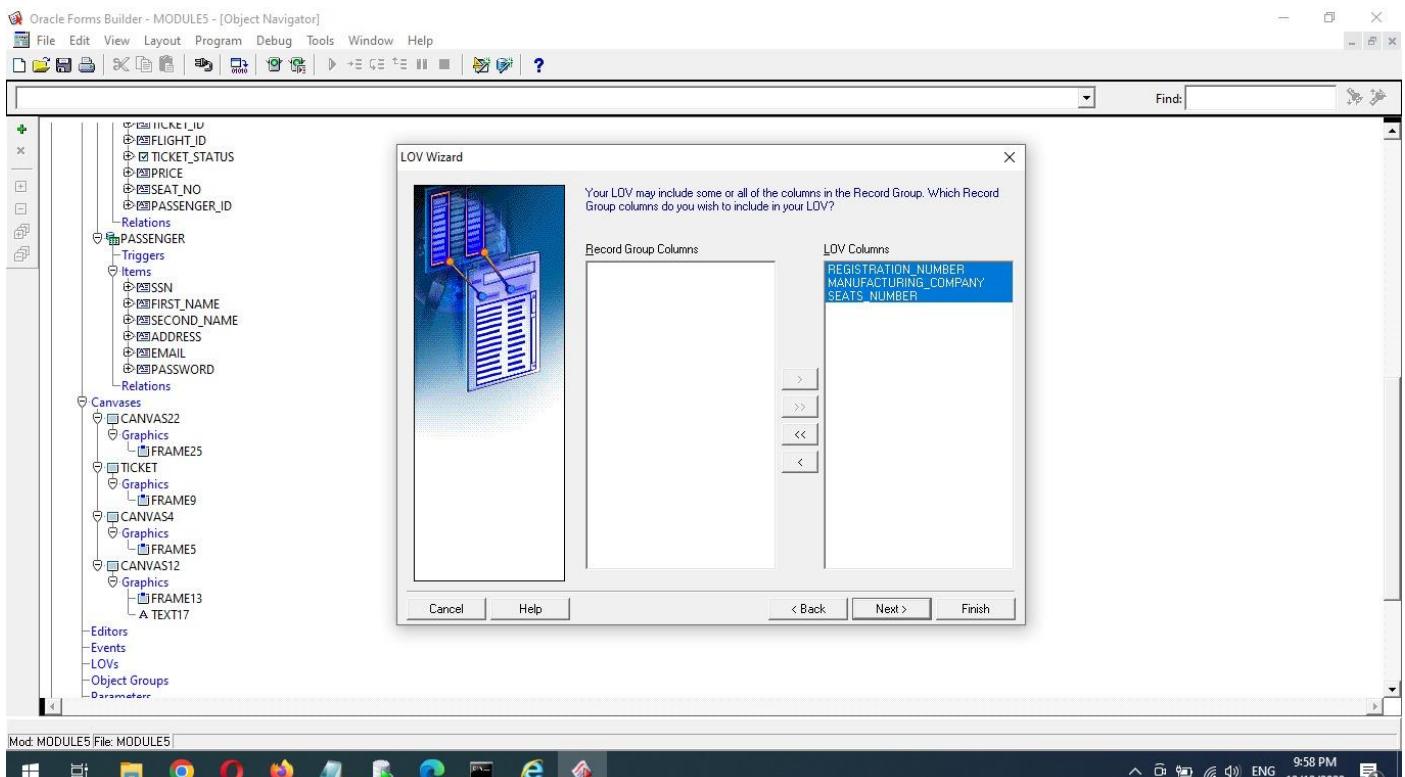
LOV:

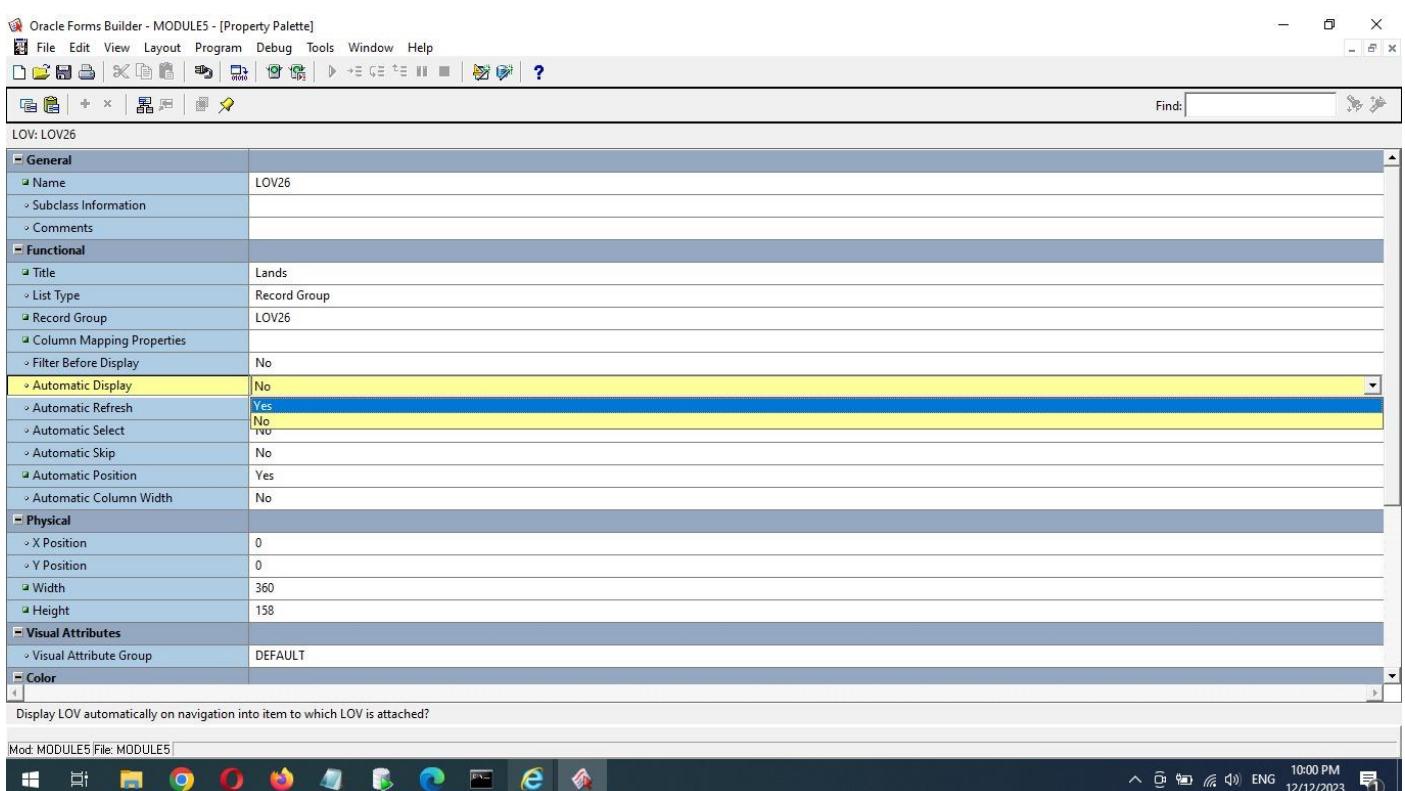
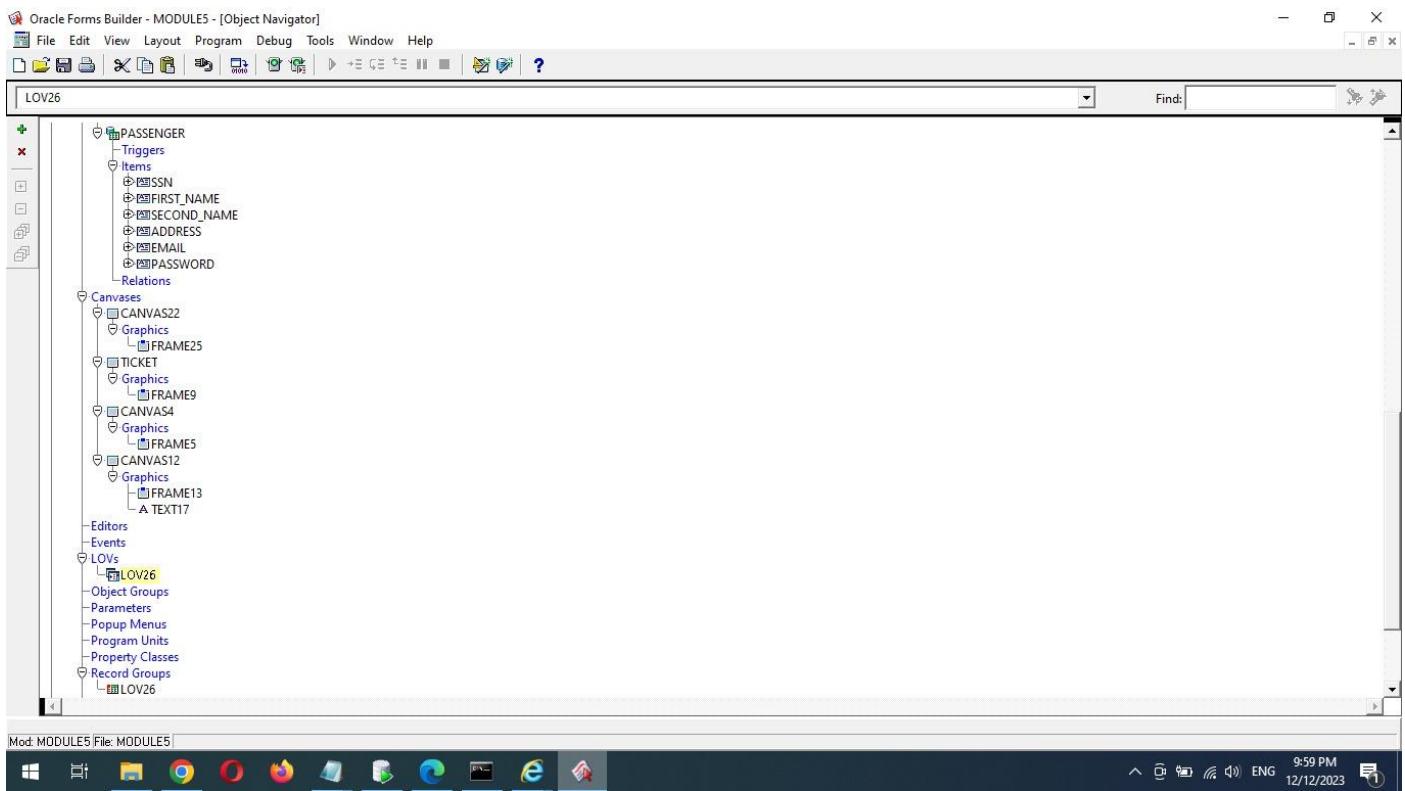


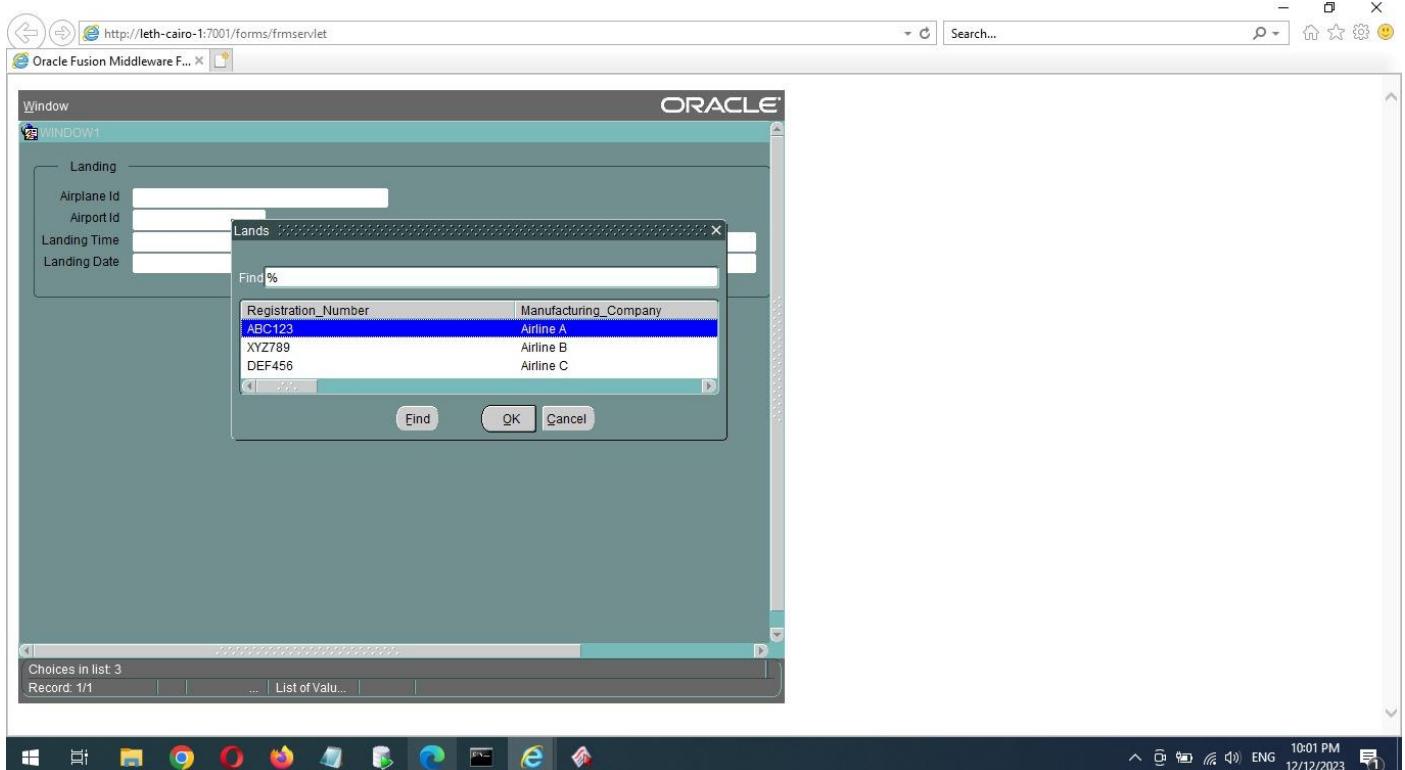






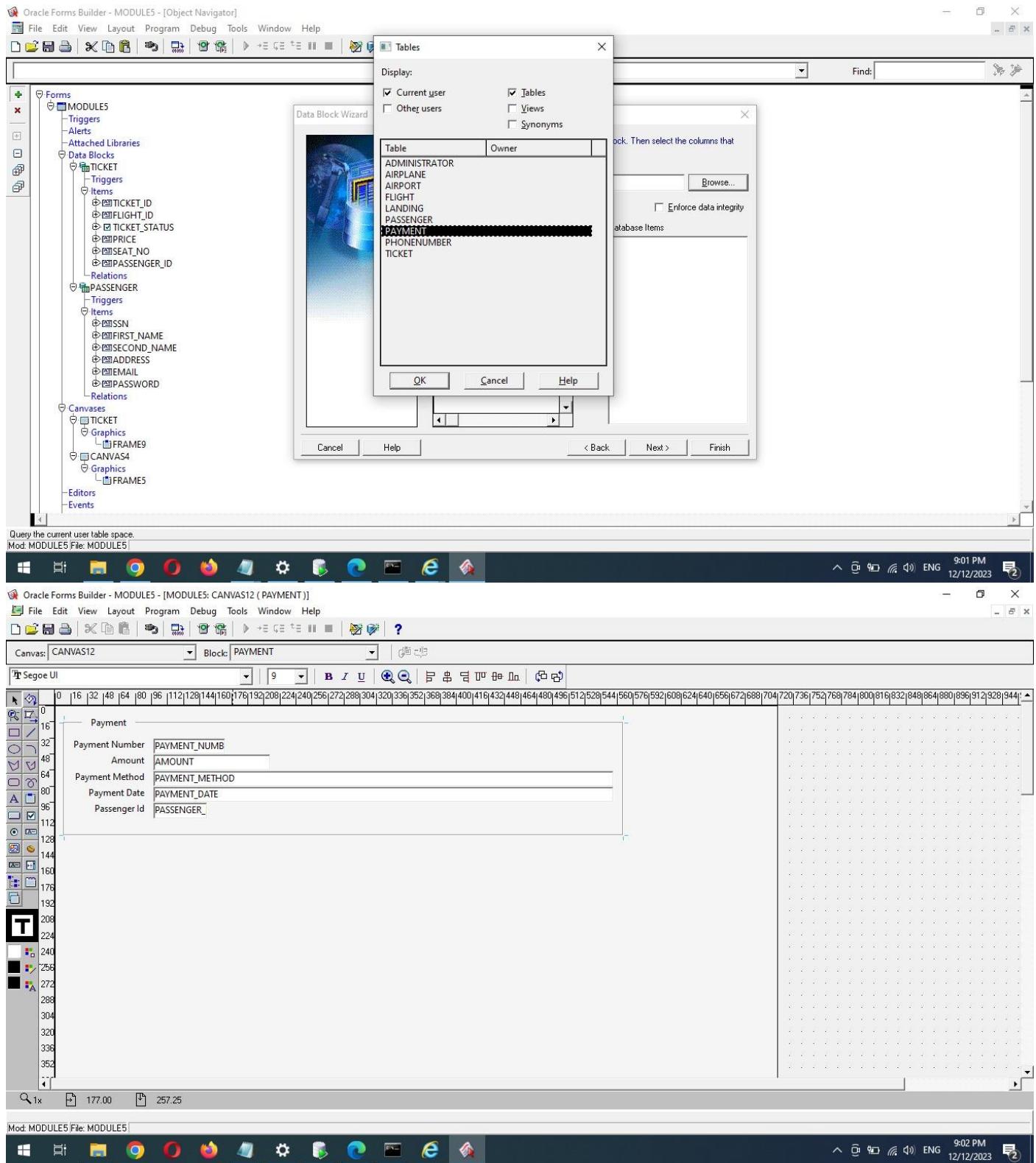


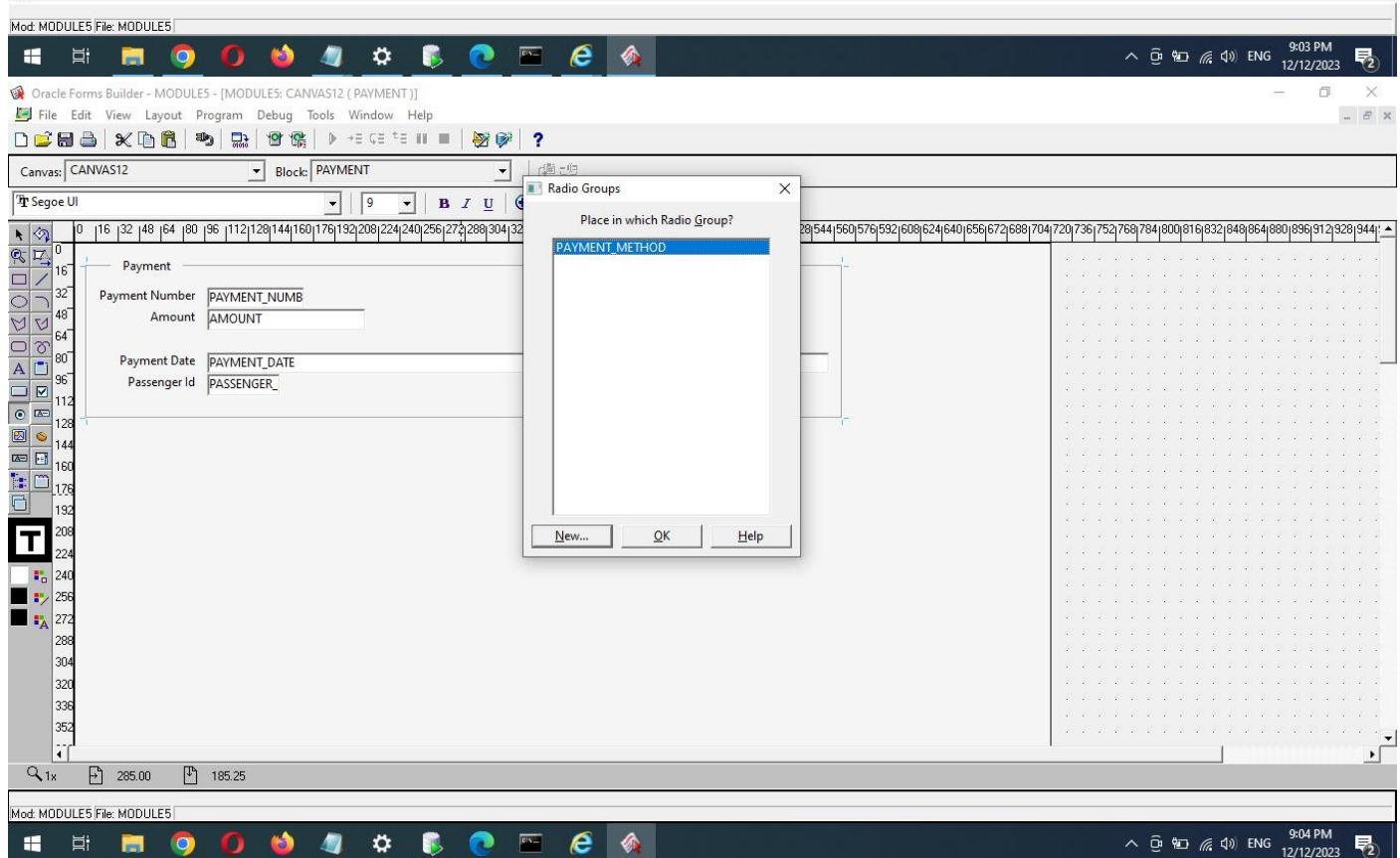
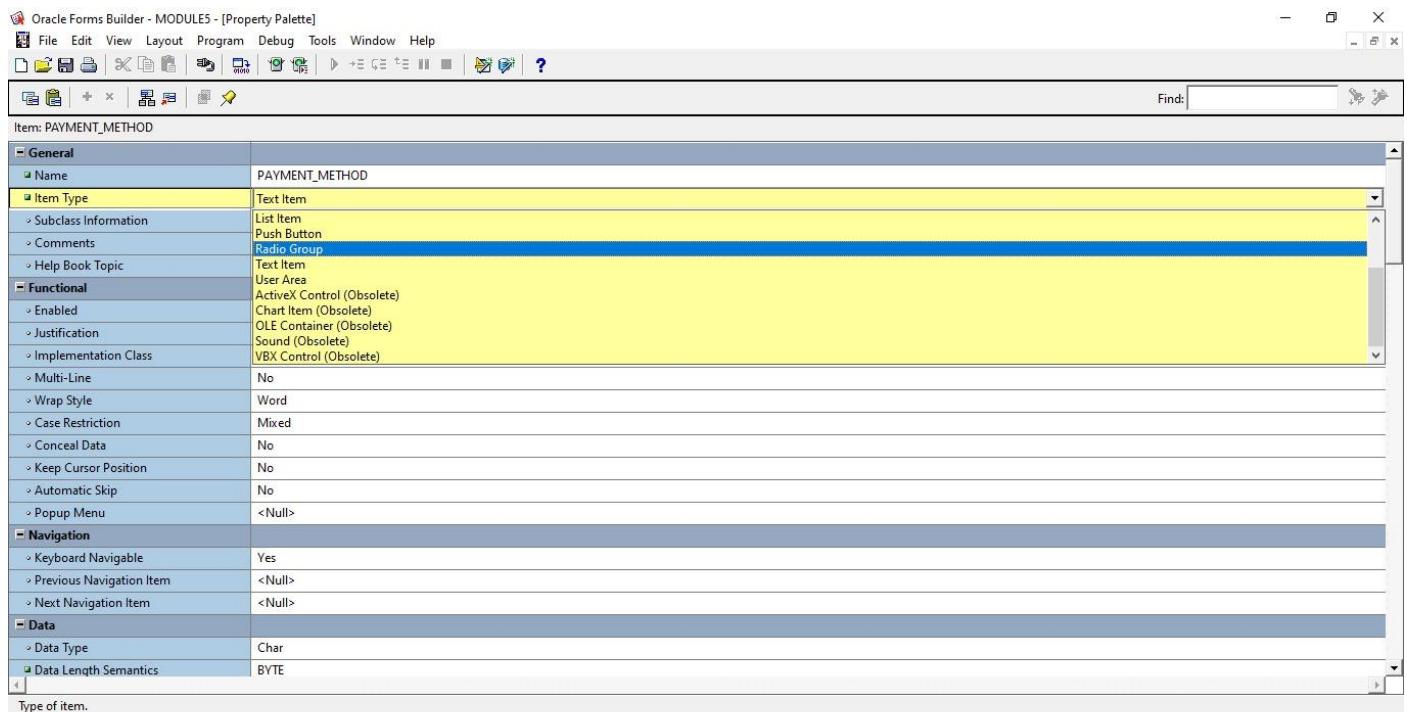


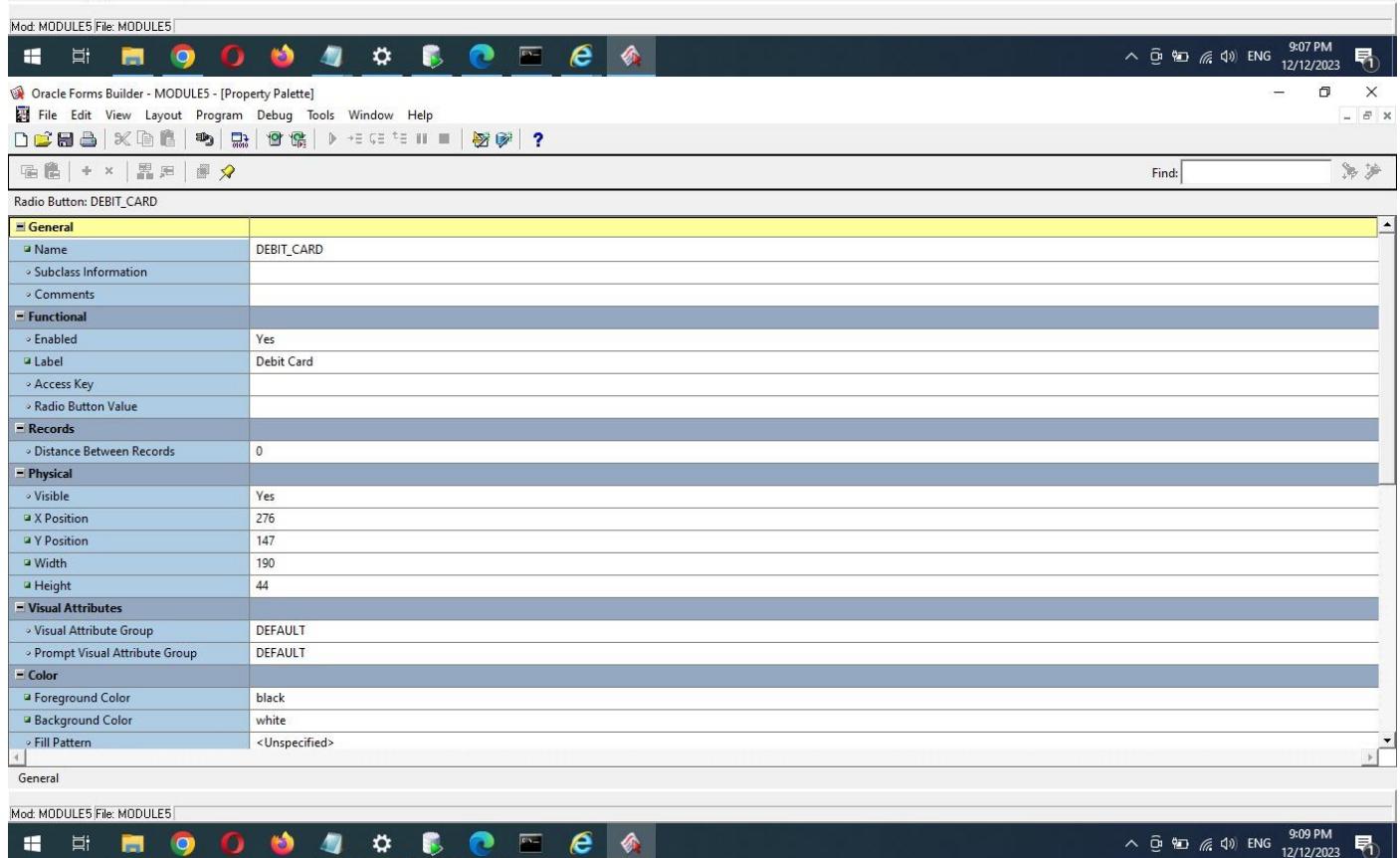
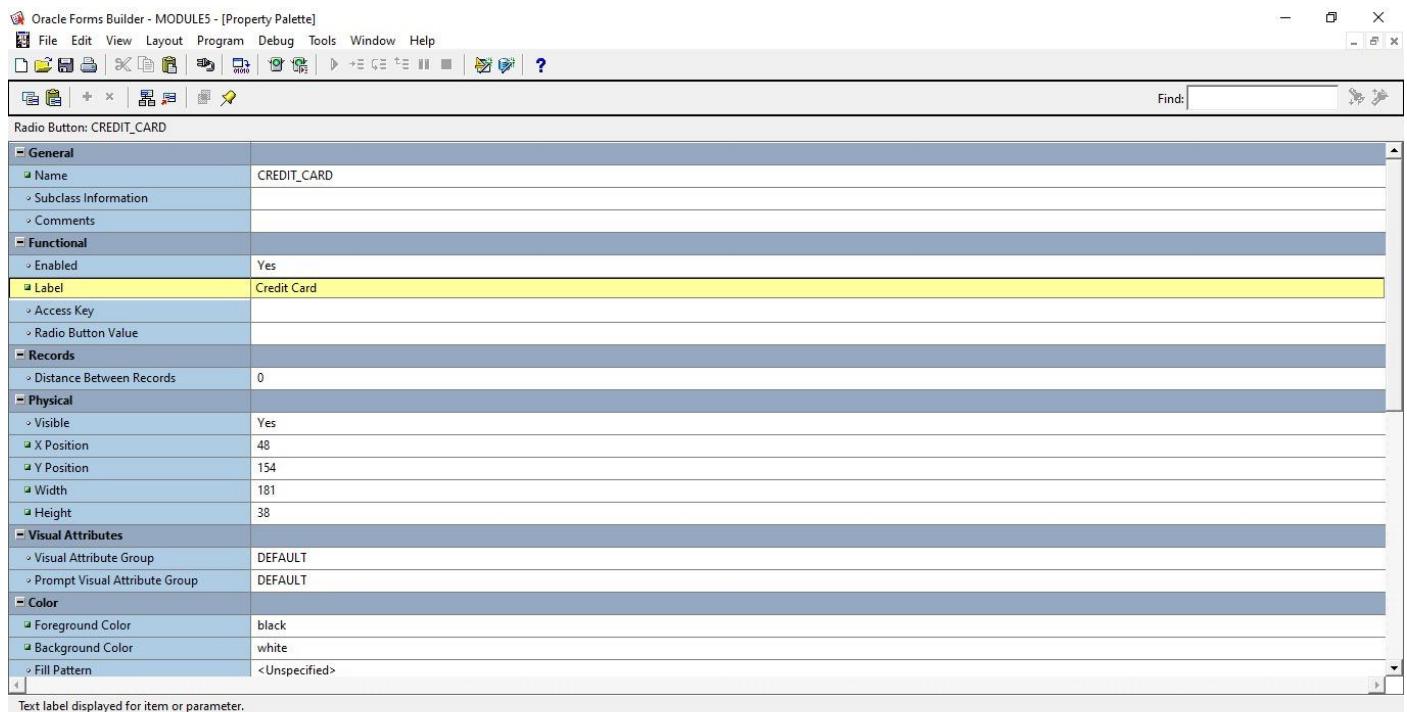


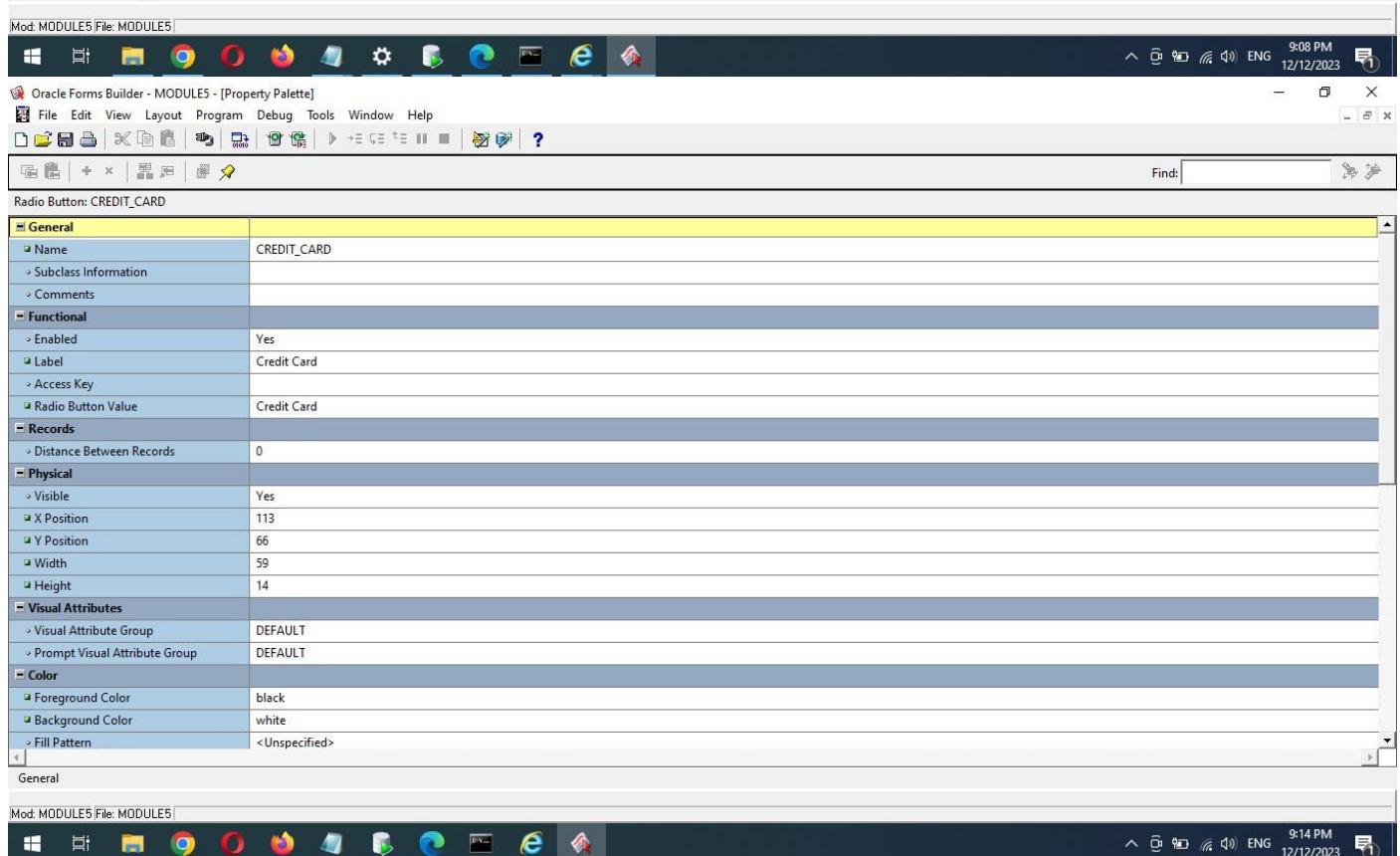
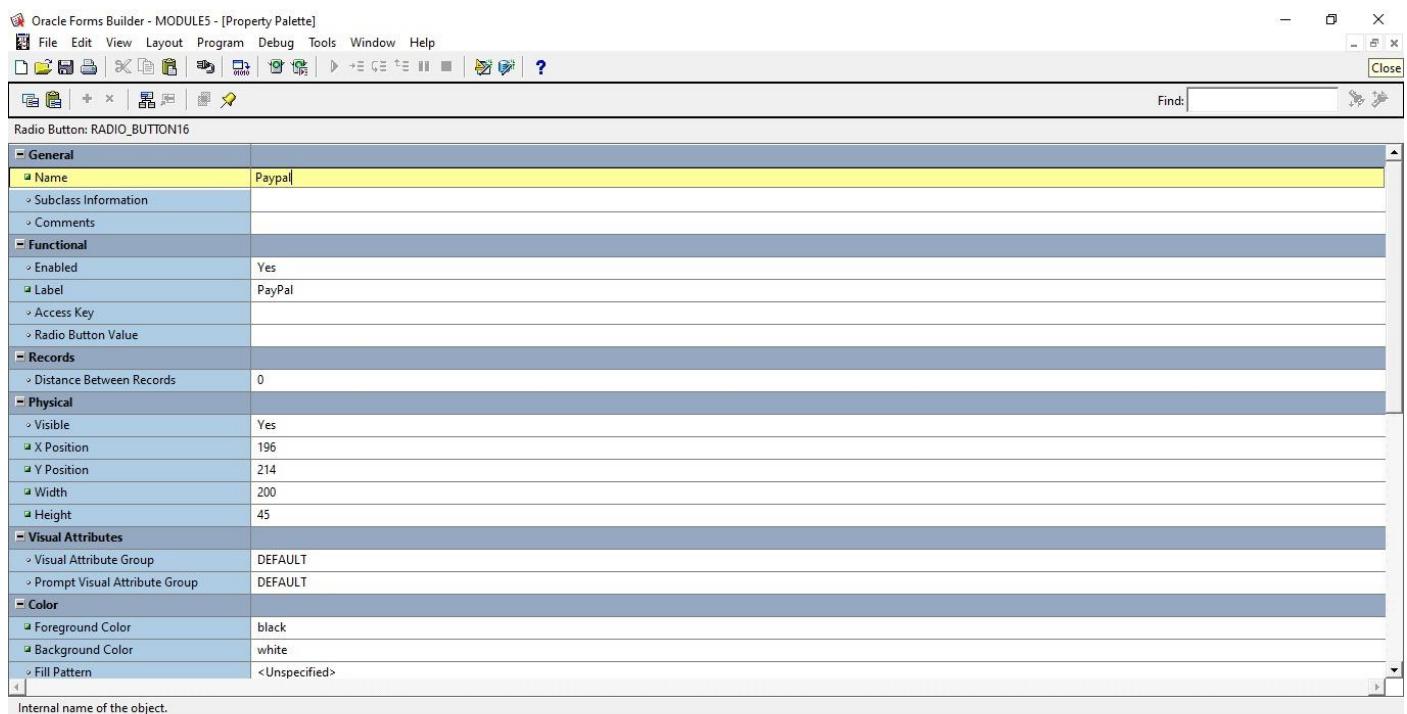
10:01 PM
ENG 12/12/2023

Radio Button:









The screenshot shows the Oracle Forms Builder interface with the title bar "Mod: MODULE5 File: MODULE5". The main window displays the "Property Palette" for a radio button component. The radio button is named "DEBIT_CARD". The "Radio Button Value" property is highlighted and set to "Debit Card". Other properties shown include Name (DEBIT_CARD), Enabled (Yes), Label (Debit Card), Access Key (None), Distance Between Records (0), Visible (Yes), X Position (240), Y Position (66), Width (74), Height (13), Visual Attribute Group (DEFAULT), Prompt Visual Attribute Group (DEFAULT), Foreground Color (black), Background Color (white), and Fill Pattern (<Unspecified>). The status bar at the bottom shows "Mod: MODULE5 File: MODULE5" and the system tray indicates the date and time as 12/12/2023 9:15 PM.

http://leth-cairo-1:7001/forms/frm servlet

Oracle Fusion Middleware F...

Action Edit Query Block Record Field Help Window

ORACLE

WINDOW1

Payment

Payment Number: 1 Max
Amount: 150 200

Payment Method: Credit Card PayPal Debit Card

Payment Date: 2023-01-02

Passenger Id: 12345

Previous Record Next Record

Record: 1/3

10:08 PM
12/14/2023

Combo Box:

Oracle Forms Builder - MODULE5 - [Property Palette]

File Edit View Layout Program Debug Tools Window Help

Find:

Item: LIST41

- Number of Items Displayed	0
- Database	
> Database Item	Yes
Column Name	TICKET_STATUS
> Primary Key	No
> Query Only	No
> Query Allowed	Yes
> Insert Allowed	Yes
> Update Allowed	Yes
> Update Only if NULL	No
- Physical	
> Visible	Yes
Canvas	TICKET
> Tab Page	<Null>
X Position	265
Y Position	84
Width	87
Height	21
- Visual Attributes	
> Visual Attribute Group	DEFAULT
> Prompt Visual Attribute Group	DEFAULT
- Color	
Foreground Color	black
Background Color	white

Internal name of the object.

Mod: MODULE5 File: MODULE5

Windows Taskbar: ENG 11:05 PM 12/14/2023

Oracle Forms Builder - MODULE5 - [Property Palette]

File Edit View Layout Program Debug Tools Window Help

Find:

Item: LIST41

- General	
Name	LIST
Item Type	List Item
> Subclass Information	
> Comments	
> Help Book Topic	
- Functional	
> Enabled	Yes
Elements in List	
List Style	Combo Box
Mapping of Other Values	Others
> Implementation Class	
> Case Restriction	Mixed
> Popup Menu	<Null>
- Navigation	
> Keyboard Navigable	Yes
> Mouse Navigate	Yes
> Previous Navigation Item	<Null>
> Next Navigation Item	<Null>
- Data	
> Data Type	Char
> Data Length Semantics	Null
> Maximum Length	30
> Initial Value	

Internal name of the object.

Mod: MODULE5 File: MODULE5

Windows Taskbar: ENG 11:05 PM 12/14/2023

http://leth-cairo-1:7001/forms/frmsservlet

Oracle Fusion Middleware F...

Action Edit Query Block Record Field Help Window

ORACLE

TICKET

Ticket Id	1
Flight Id	123
Ticket Status	<input checked="" type="checkbox"/>
Price	150
Seat No	10
Passenger Id	12345
	Booked

WINDOW1

Record: 1/1

11:14 PM 12/14/2023

A screenshot of an Oracle Forms application window titled "WINDOW1". The window has a toolbar at the top with various icons for actions like New, Open, Save, and Print. The main area is titled "TICKET" and contains several input fields: Ticket Id (1), Flight Id (123), Ticket Status (checked), Price (150), Seat No (10), Passenger Id (12345), and a status field (Booked). Below the form is a message bar stating "Record: 1/1". The bottom of the screen shows a Windows taskbar with icons for Start, Task View, File Explorer, Edge, and other applications. The system tray shows the date and time as 11:14 PM on 12/14/2023.

Check box:

Oracle Forms Builder - MODULE5 - [Property Palette]

File Edit View Layout Program Debug Tools Window Help

Find:

Item: TICKET_STATUS

General	
Name	TICKET_STATUS
Item Type	Text Item
Subclass Information	Bean Area
Comments	Check Box
Help Book Topic	Display Item
Implementation Class	Hierarchical Tree
Functional	Image
Enabled	List Item
Justification	Push Button
Text Item	Radio Group
User Area	
Multi-Line	No
Wrap Style	Word
Case Restriction	Mixed
Conceal Data	No
Keep Cursor Position	No
Automatic Skip	No
Popup Menu	<Null>
Navigation	
Keyboard Navigable	Yes
Previous Navigation Item	<Null>
Next Navigation Item	<Null>
Data	
Data Type	Char
Data Length Semantics	BYTE

Type of item.

Module built successfully.

Mod: MODULE5 File: MODULE5

8:55 PM 12/12/2023

Oracle Forms Builder - MODULE5 - [Property Palette]

File Edit View Layout Program Debug Tools Window Help

Find:

Item: TICKET_STATUS

General	
Access Key	
Implementation Class	
Value when Checked	Booked
Value when Unchecked	Pending
Check Box Mapping of Other Values	Checked
Popup Menu	<Null>
Navigation	
Keyboard Navigable	Yes
Mouse Navigate	Yes
Previous Navigation Item	<Null>
Next Navigation Item	<Null>
Data	
Data Type	Char
Data Length Semantics	BYTE
Maximum Length	50
Initial Value	
Copy Value from Item	
Synchronize with Item	<Null>
Calculation	
Calculation Mode	None
Formula	
Summary Function	None
Summarized Block	<Null>
Summarized Item	<Null>

Value displayed by check box in unchecked state.

Module built successfully.

Mod: MODULE5 File: MODULE5

8:56 PM 12/12/2023

Oracle Forms Builder - MODULE5 - [Property Palette]

File Edit View Layout Program Debug Tools Window Help

Find:

Item: TICKET_STATUS

> Access Key	
> Implementation Class	
Value when Checked	Booked
Value when Unchecked	Pending
> Check Box Mapping of Other Values	Checked
> Popup Menu	<Null>
- Navigation	
Keyboard Navigable	Yes
Mouse Navigate	Yes
Previous Navigation Item	<Null>
Next Navigation Item	<Null>
- Data	
Data Type	Char
Data Length Semantics	BYTE
Maximum Length	50
> Initial Value	Pending
> Copy Value from Item	
> Synchronize with Item	<Null>
- Calculation	
Calculation Mode	None
Formula	
Summary Function	None
Summarized Block	<Null>
Summarized Item	<Null>

Default value assigned to item whenever a record is created.

Module built successfully.

Mod: MODULE5 File: MODULE5

8:56 PM 12/12/2023

Oracle Forms Builder - MODULE5 - [Property Palette]

File Edit View Layout Program Debug Tools Window Help

Find:

Item: TICKET_STATUS

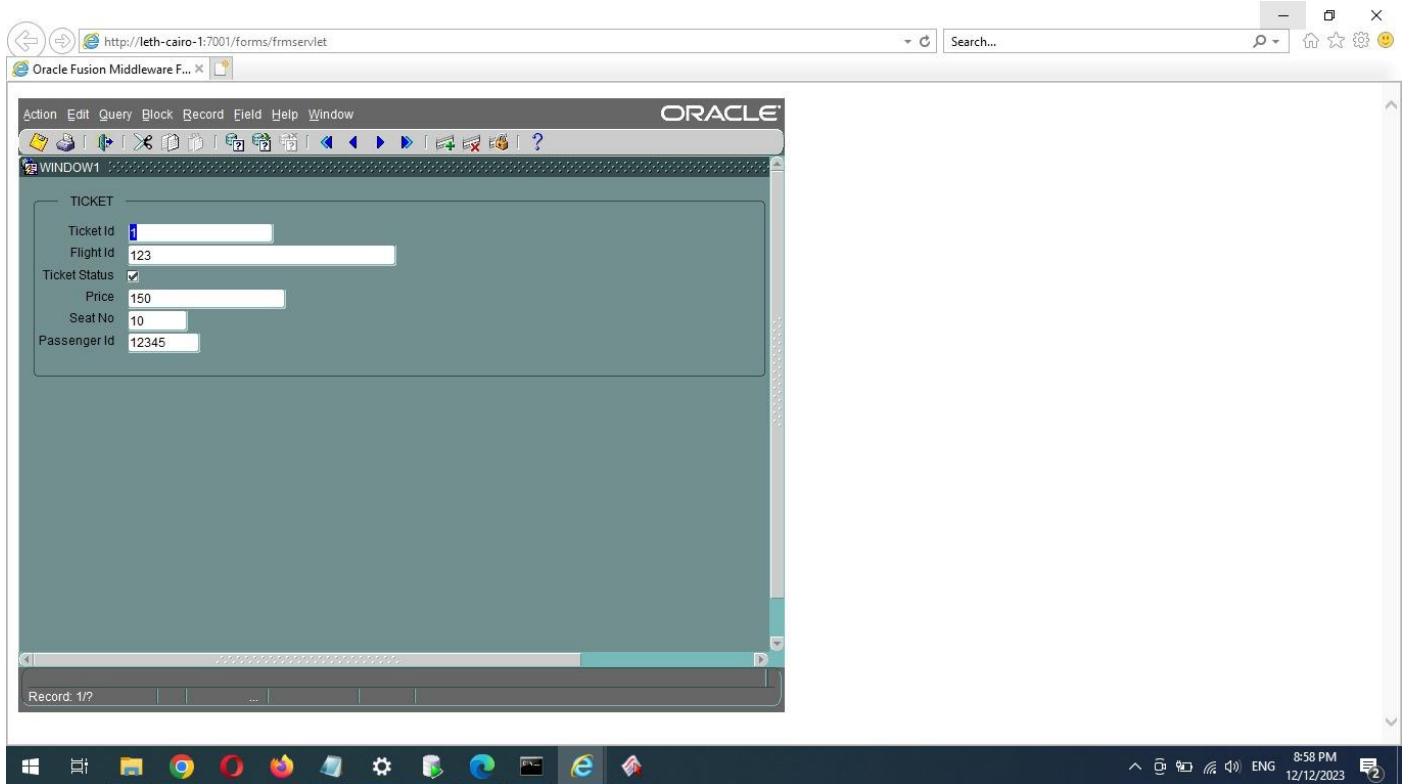
> Access Key	
> Implementation Class	
Value when Checked	Booked
Value when Unchecked	Pending
> Check Box Mapping of Other Values	Unchecked
> Popup Menu	<Null>
- Navigation	
Keyboard Navigable	Yes
Mouse Navigate	Yes
Previous Navigation Item	<Null>
Next Navigation Item	<Null>
- Data	
Data Type	Char
Data Length Semantics	BYTE
Maximum Length	50
> Initial Value	Pending
> Copy Value from Item	
> Synchronize with Item	<Null>
- Calculation	
Calculation Mode	None
Formula	
Summary Function	None
Summarized Block	<Null>
Summarized Item	<Null>

How to interpret fetched/assigned value that is not pre-defined.

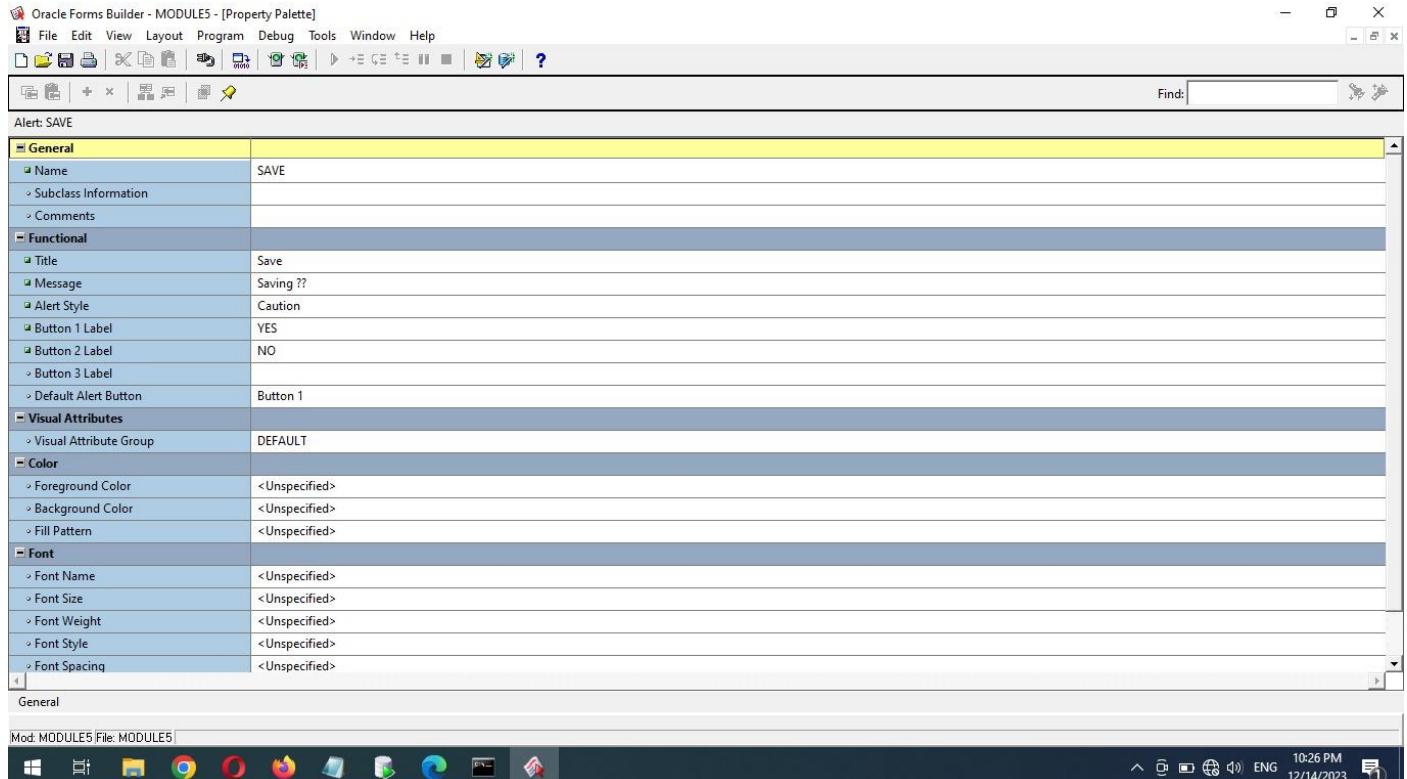
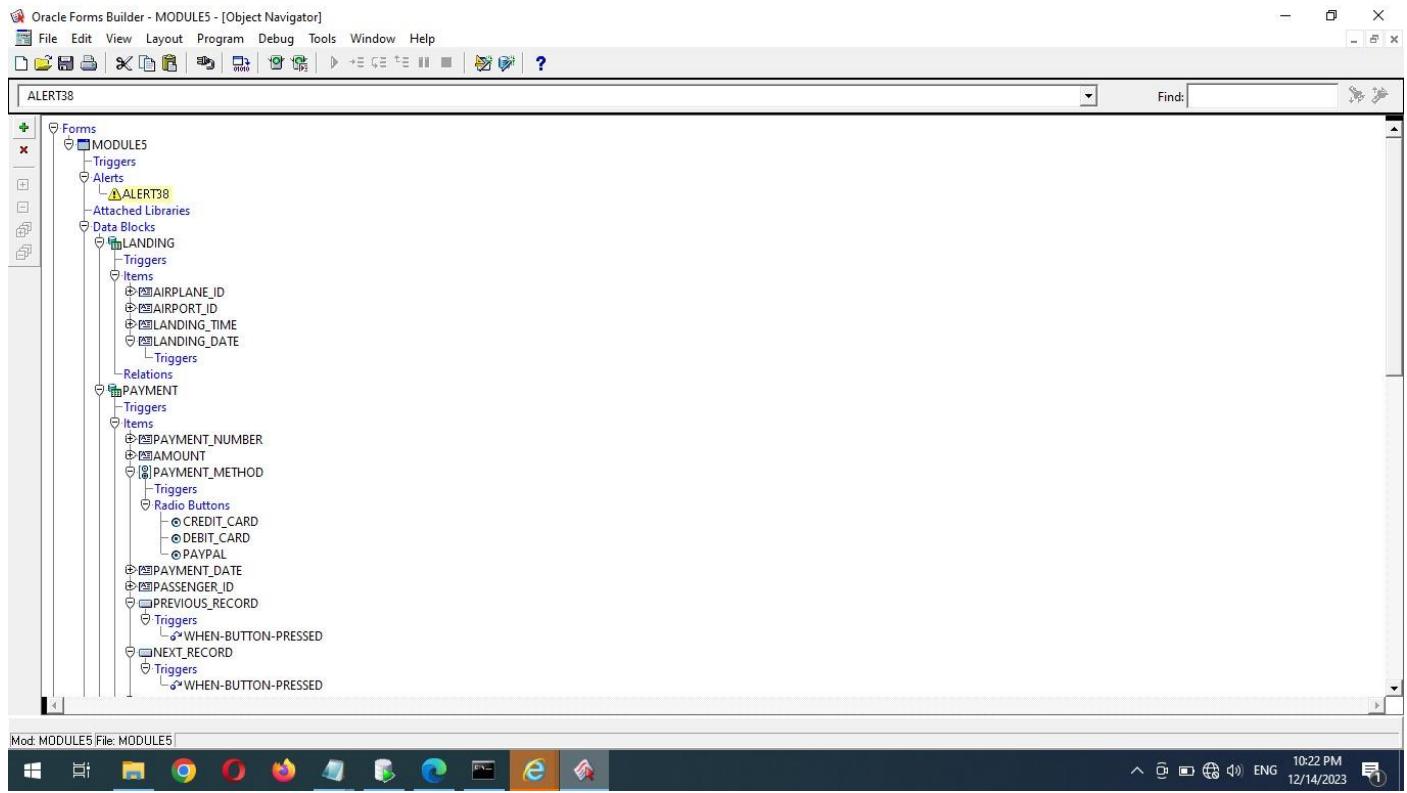
Module built successfully.

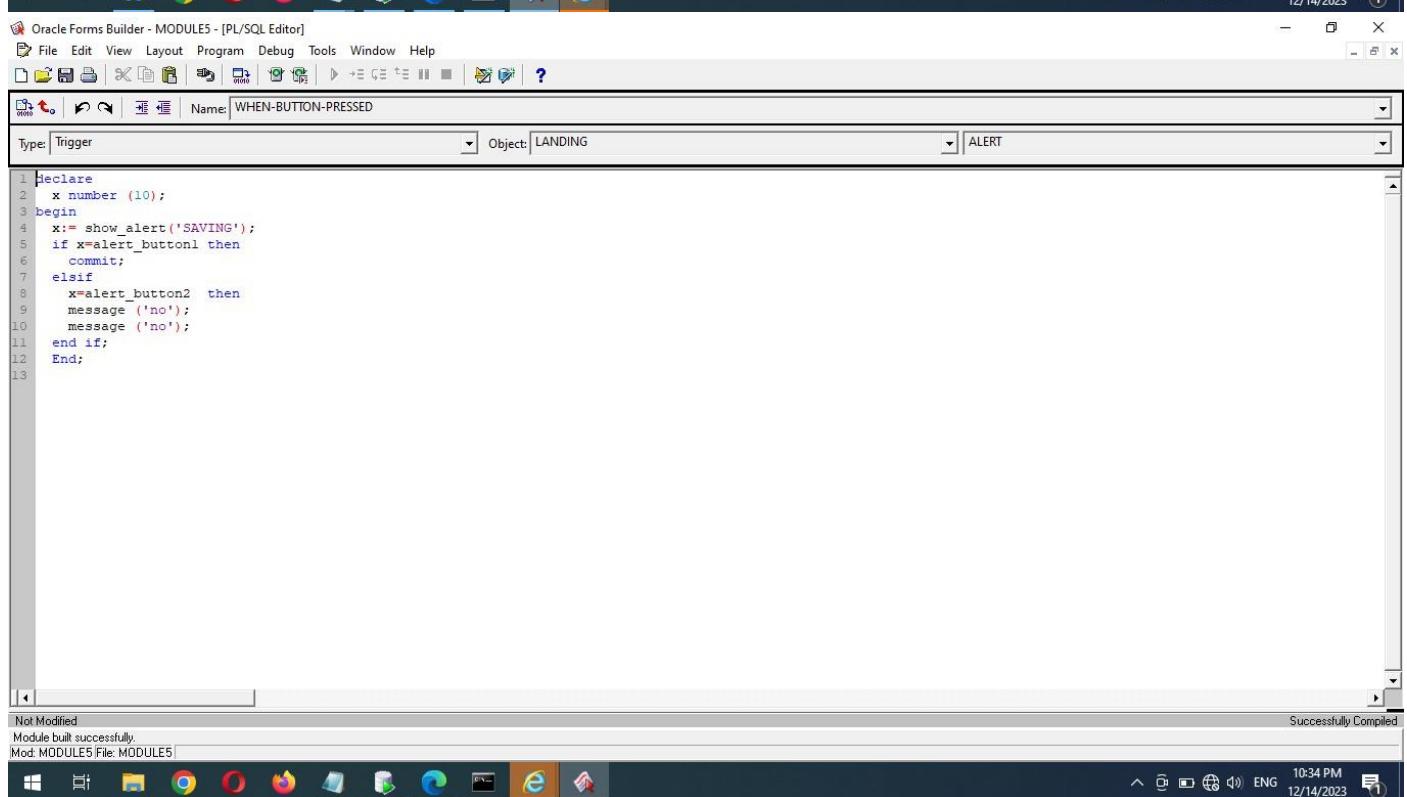
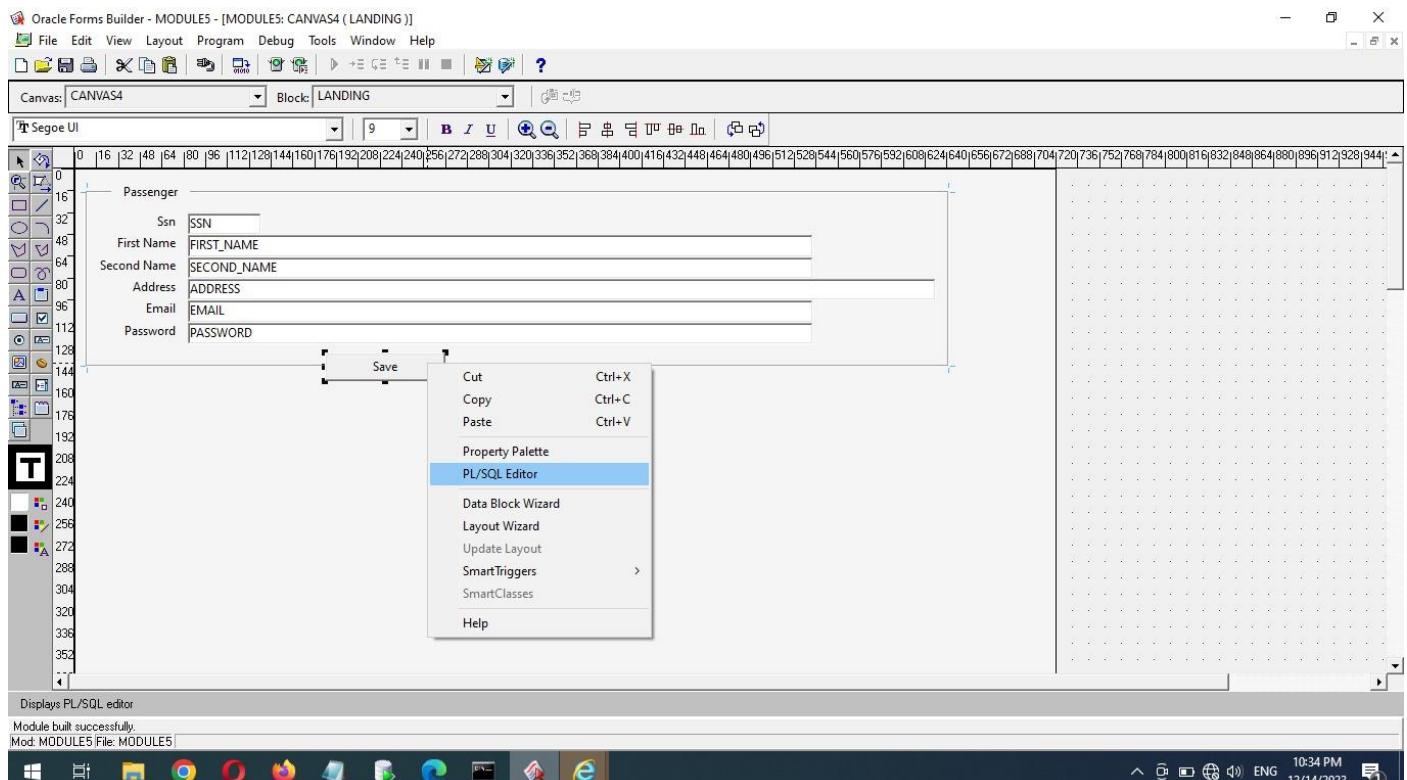
Mod: MODULE5 File: MODULE5

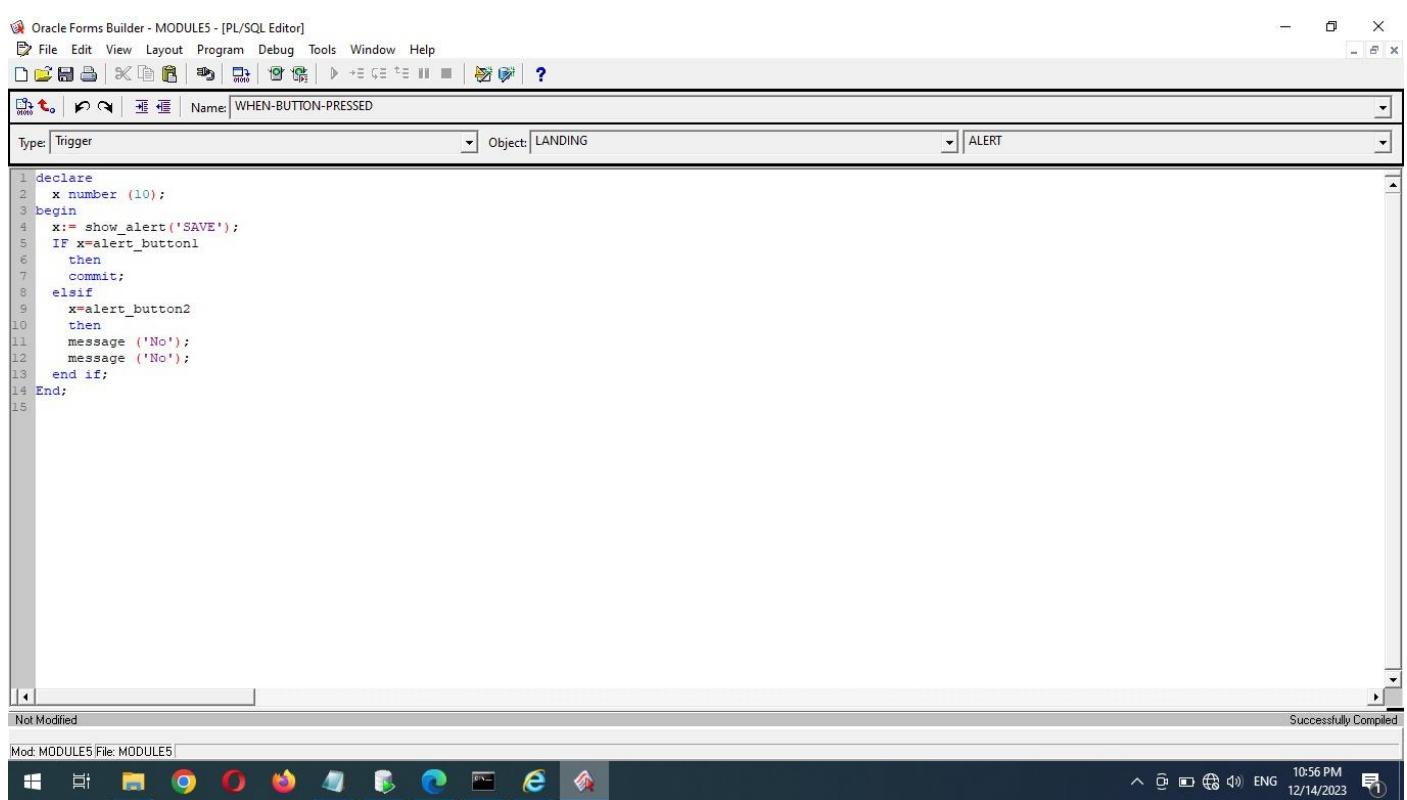
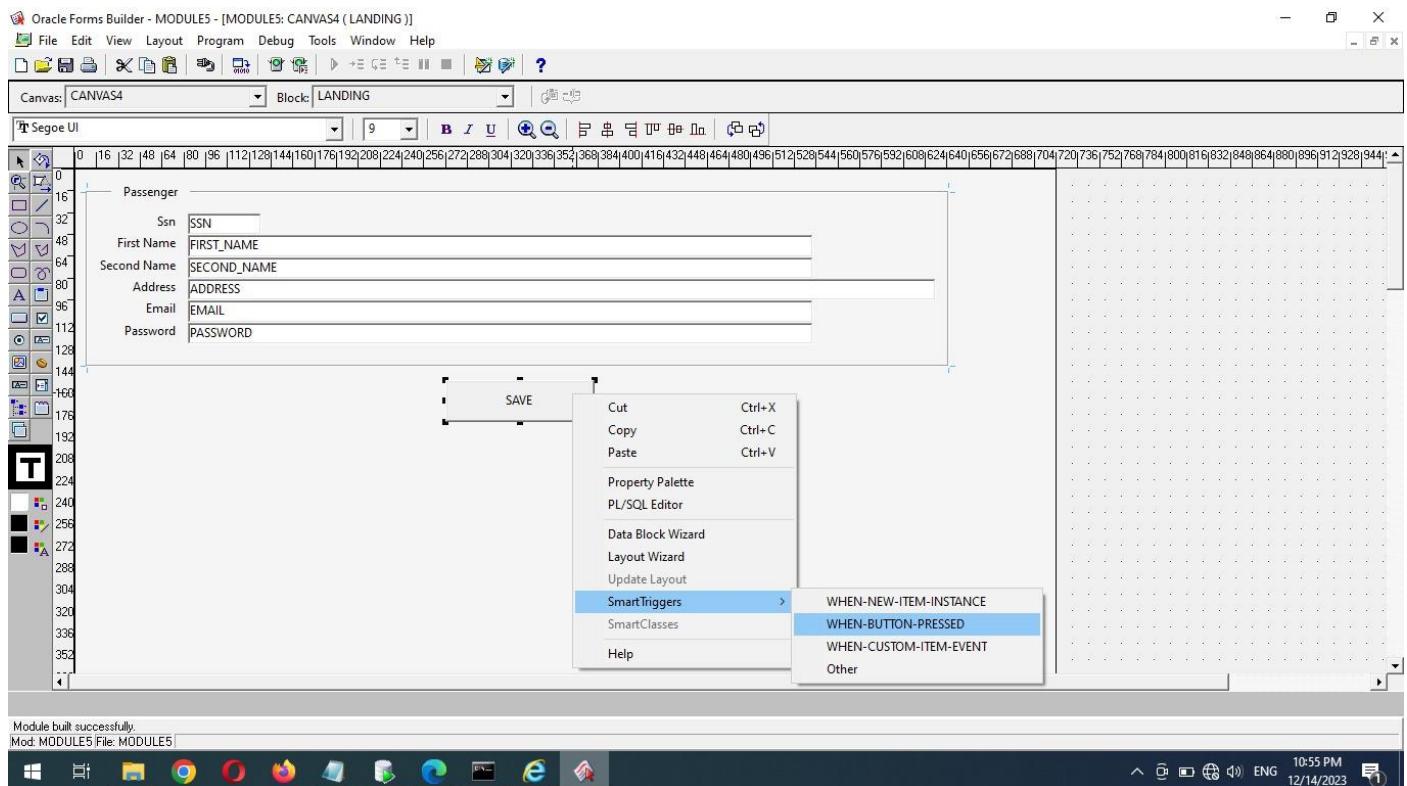
8:57 PM 12/12/2023

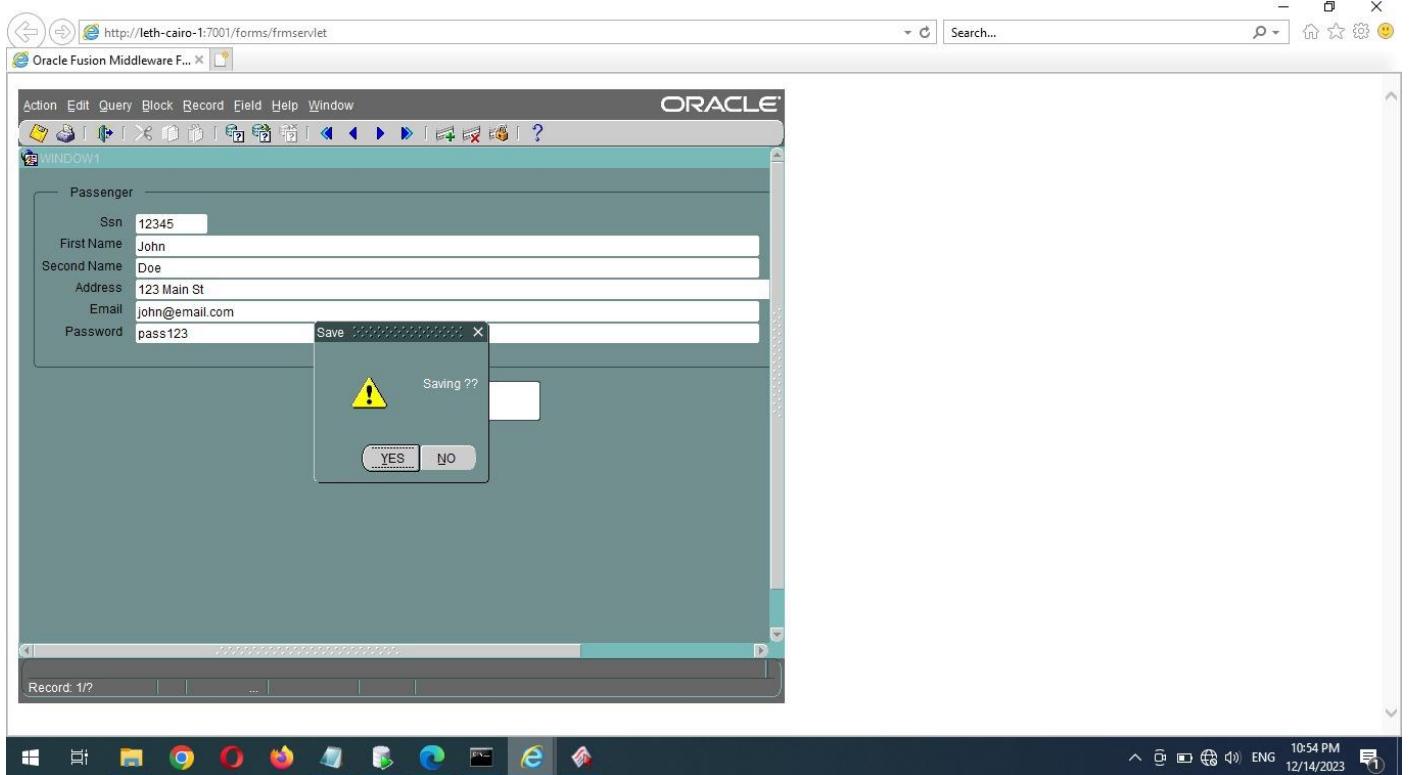


Alerts:









Calculated Fields:

Oracle SQL Developer : TABLE FLIGHTT.PAYMENT@fligtt

File Edit View Navigate Run Source Versioning Tools Help

Connections SYSTEM fligtt PAYMENT

Columns Data Constraints Grants Statistics Triggers Flashback Dependencies Details Indexes SQL

ARRIVAL_DATE AIRPLANE_ID ADMIN_ID LANDING AIRPLANE_ID AIRPORT_ID LANDING_TIME LANDING_DATE PASSENGER SSN FIRST_NAME SECOND_NAME ADDRESS EMAIL PASSWORD PAYMENT PHONENUMBER TICKET TICKET_ID FLIGHT_ID TICKET_STATUS PRICE SEAT_NO PASSENGER_ID

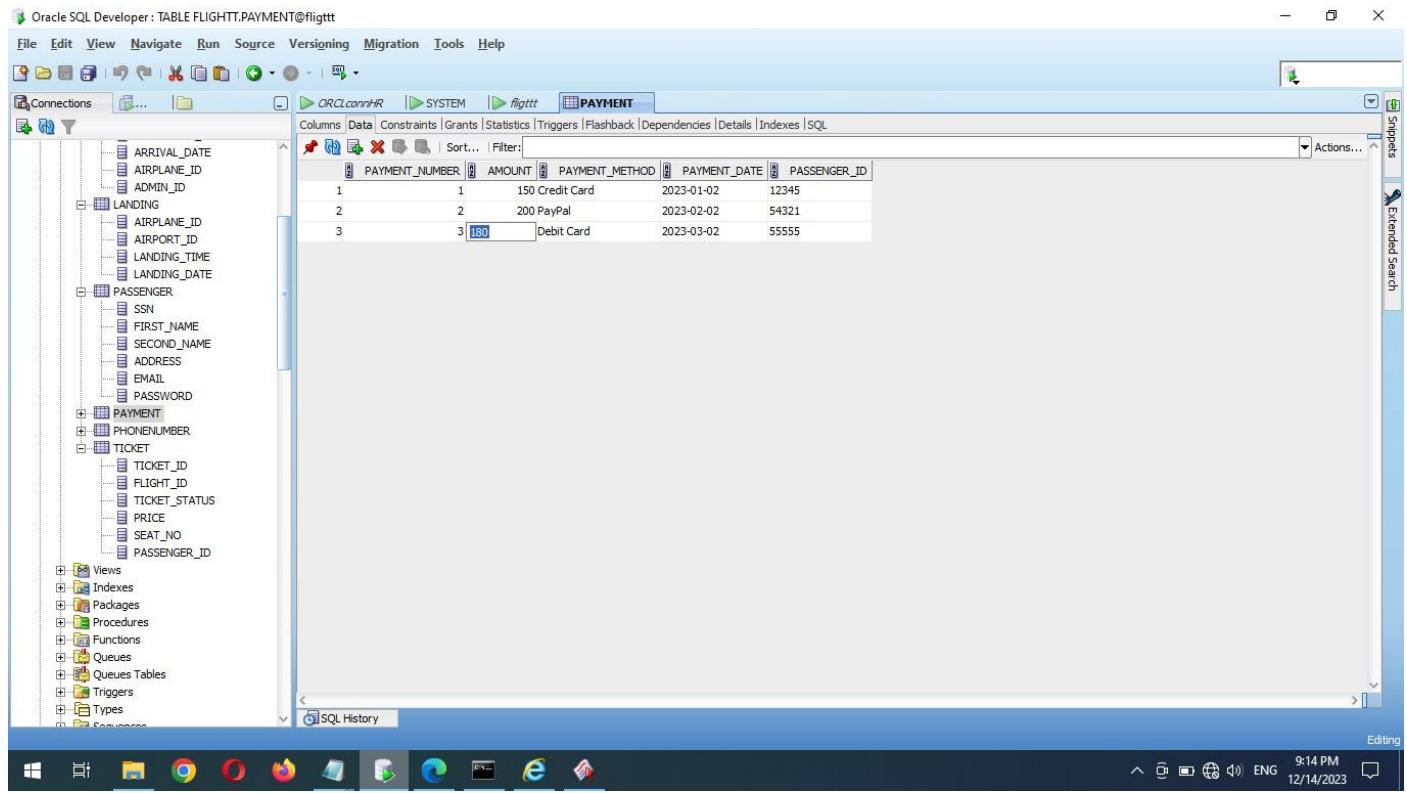
PAYMENT_NUMBER	AMOUNT	PAYMENT_METHOD	PAYMENT_DATE	PASSENGER_ID
1	150	Credit Card	2023-01-02	12345
2	200	PayPal	2023-02-02	54321
3	180	Debit Card	2023-03-02	55555

Actions... Snippets Extended Search

Views Indexes Packages Procedures Functions Queues Queues Tables Triggers Types Sequences

SQL History

Editing 9:14 PM 12/14/2023



Oracle Forms Builder - MODULES - [MODULES: CANVAS12 (PAYMENT)]

File Edit View Layout Program Debug Tools Window Help

Canvas: CANVAS12 Block: LANDING

Segoe UI

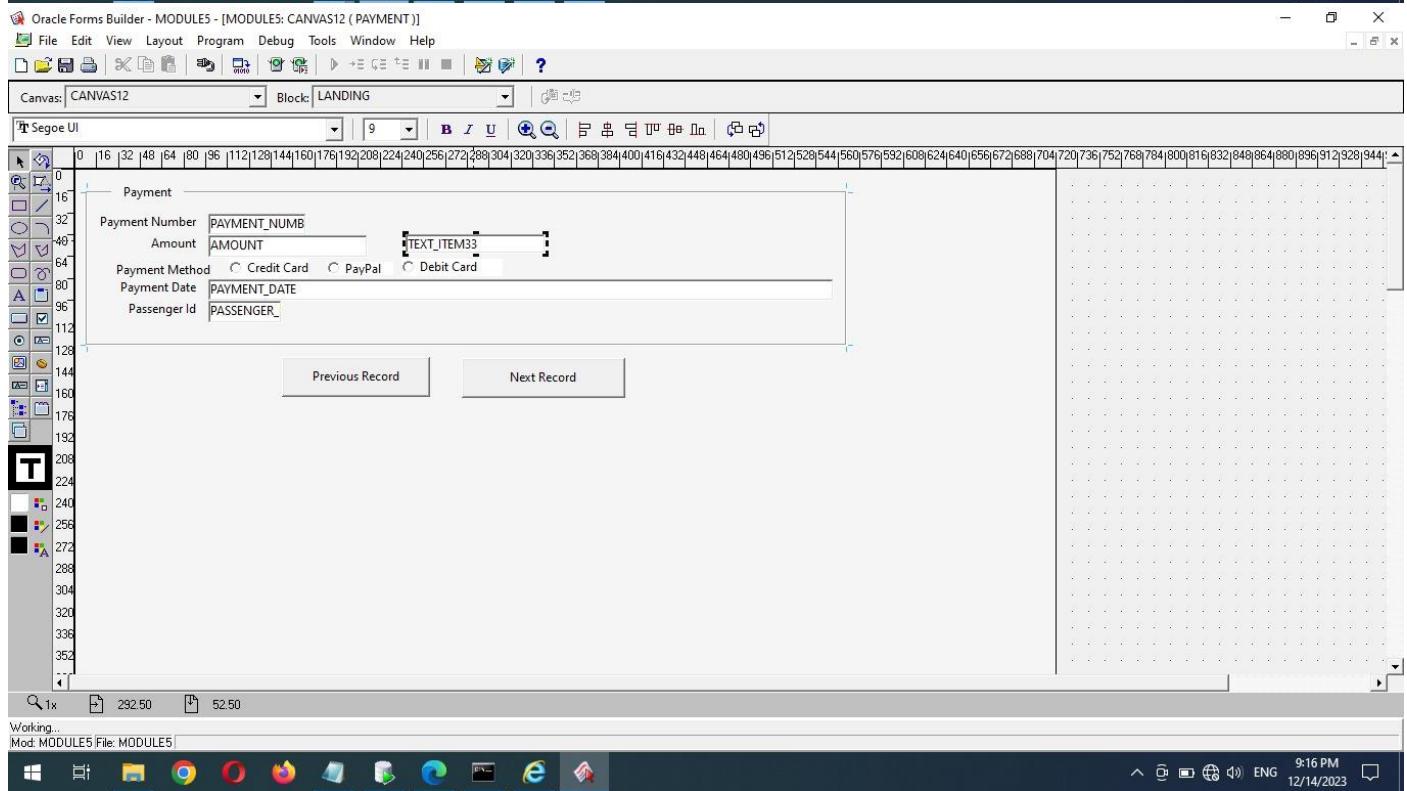
Payment

Payment Number: PAYMENT_NUMB
Amount: AMOUNT
Payment Method: Credit Card / PayPal / Debit Card
Payment Date: PAYMENT_DATE
Passenger Id: PASSENGER

Previous Record Next Record

Working... Mod: MODULE5 File: MODULE5

Editing 9:16 PM 12/14/2023



Oracle Forms Builder - MODULE5 - [Property Palette]

File Edit View Layout Program Debug Tools Window Help

Find:

Item: TEXT_ITEM33

General	
Name	Max_Amount
Item Type	Text Item
> Subclass Information	
> Comments	
> Help Book Topic	
Functional	
> Enabled	Yes
Justification	Start
> Implementation Class	
> Multi-Line	No
> Wrap Style	Word
> Case Restriction	Mixed
> Conceal Data	No
> Keep Cursor Position	No
> Automatic Skip	No
> Popup Menu	<Null>
Navigation	
> Keyboard Navigable	Yes
> Previous Navigation Item	<Null>
> Next Navigation Item	<Null>
Data	
Data Type	Char
Data Length Semantics	Null

Internal name of the object.

Mod: MODULE5 File: MODULE5

File Edit View Layout Program Debug Tools Window Help

Find:

Item: MAX_AMOUNT

General	
Data Type	Number
Data Length Semantics	Null
Maximum Length	30
Initial Value	
Required	No
Format Mask	
Lowest Allowed Value	
Highest Allowed Value	
Copy Value from Item	
Synchronize with Item	<Null>
Calculation	
Calculation Mode	Summary
Formula	
Summary Function	Max
Summarized Block	PAYMENT
Summarized Item	AMOUNT
Records	
Current Record Visual Attribute Group	<Null>
Distance Between Records	0
Number of Items Displayed	0
Database	
Database Item	Yes
Column Name	
Primary Key	No

Item whose value is summarized to assign a value to a summary calculated item.

Mod: MODULE5 File: MODULE5

File Edit View Layout Program Debug Tools Window Help

Find:

http://leth-cairo-1:7001/forms/frm servlet

Oracle Fusion Middleware F...

Action Edit Query Block Record Field Help Window

ORACLE

WINDOW1

Payment

Payment Number: Max:
Amount: 200

Payment Method: Credit Card PayPal Debit Card

Payment Date: 2023-01-02

Passenger Id: 12345

Previous Record Next Record

Record: 1/3

This screenshot shows a desktop application window titled 'WINDOW1' running on Oracle Forms. The window title bar includes standard icons for minimize, maximize, and close, along with a search bar and a toolbar with various icons. The main content area is titled 'Payment' and contains several input fields: 'Payment Number' (with a value of 1), 'Max' (with a value of 200), 'Amount' (with a value of 150), and 'Passenger Id' (with a value of 12345). There are also radio buttons for 'Payment Method' (Credit Card is selected), 'Payment Date' (set to 2023-01-02), and buttons for 'Previous Record' and 'Next Record'. At the bottom of the window, a status bar displays 'Record: 1/3'. The system tray at the bottom of the screen shows the Windows logo, taskbar icons for various applications like File Explorer, Google Chrome, and Microsoft Edge, and a system clock indicating 10:08 PM on 12/14/2023.

Triggers:

The image shows two separate windows of Oracle Forms Builder, each displaying a PL/SQL trigger definition.

Top Window (MODULE2):

- Title Bar:** Oracle Forms Builder - MODULE2 - [PL/SQL Editor]
- Toolbar:** File Edit View Layout Program Debug Tools Window Help
- Status Bar:** Not Compiled
- Trigger Details:** Type: Trigger, Name: WHEN-BUTTON-PRESSED, Object: TICKET, Item: PUSH_BUTTON21
- Code Area:**

```
i next_record;
```
- Bottom Status Bar:** Mod: MODULE2 File: MODULE2 | Not Modified | 10:54 PM 11/12/2023

Bottom Window (MODULE5):

- Title Bar:** Oracle Forms Builder - MODULE5 - [PL/SQL Editor]
- Toolbar:** File Edit View Layout Program Debug Tools Window Help
- Status Bar:** Not Compiled
- Trigger Details:** Type: Trigger, Name: WHEN-BUTTON-PRESSED, Object: PAYMENT, Item: PREVIOUS_RECORD
- Code Area:**

```
i previous_record;
```
- Bottom Status Bar:** Mod: MODULE5 File: MODULE5 | Not Modified | 9:28 PM 12/12/2023

http://leth-cairo-1:7001/forms/frm servlet

Oracle Fusion Middleware F...

Action Edit Query Block Record Field Help Window

ORACLE

WINDOW1

Payment

Payment Number: 1
Amount: 150

Payment Method: Credit Card PayPal Debit Card

Payment Date: 2023-01-02

Passenger Id: 12345

Previous Record Next Record

Record: 1/1

9:34 PM
ENG
12/12/2023

Master Detail:

