1. Create a view named “ATL\_CHARTERS\_V” that includes the following “For each charter of aircraft to Atlanta (STL), print the charter date, charter hours flown, and the corresponding customer last name, first name, area code, and phone number”.

SQL statement:

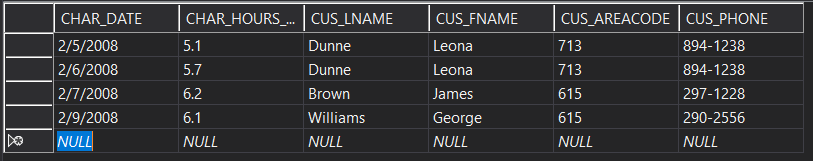
CREATE VIEW ATL\_CHARTERS\_V AS

SELECT CHARTER.CHAR\_DATE, CHARTER.CHAR\_HOURS\_FLOWN, AC\_CUSTOMER.CUS\_LNAME, AC\_CUSTOMER.CUS\_FNAME,

AC\_CUSTOMER.CUS\_AREACODE, AC\_CUSTOMER.CUS\_PHONE

FROM CHARTER, AC\_CUSTOMER

WHERE CHARTER.CUS\_CODE = AC\_CUSTOMER.CUS\_CODE AND CHARTER.CHAR\_DESTINATION = 'ATL'



1. Modify the MODEL table to add the following attribute: (Note: use ALTER TABLE and UPDATE commands for this question.)

|  |  |  |
| --- | --- | --- |
| **Attribute name** | **Attribute Description** | **Attribute type** |
| MOD\_LIFT\_ WEIGHT | Amount of weight each model can lift | Numeric |

Once the attribute has been added, update the values of all rows as per following values:

|  |
| --- |
| **Attribute values for MOD\_LIFT\_WEIGHT** |
| 10,000 for Mod\_code = DC-90A |
| 5,000 for Mod\_code = MA23-250 |
| 20,000 for Mod\_code = PA31-950 |

SQL statement:

GO

ALTER TABLE MODEL ADD

MOD\_LIFT\_WEIGHT NUMERIC

GO

UPDATE MODEL SET

MOD\_LIFT\_WEIGHT = 10000 WHERE MOD\_CODE = 'DC-90A'

GO

UPDATE MODEL SET

MOD\_LIFT\_WEIGHT = 5000 WHERE MOD\_CODE = 'MA23-250'

GO

UPDATE MODEL SET

MOD\_LIFT\_WEIGHT = 20000 WHERE MOD\_CODE = 'PA31-950'

1. Create a trigger named trg\_charter\_hours that will automatically update the AIRCRAFT table after a new CHARTER row is added. Use the CHARTER table’s CHAR\_HOURS\_FLOWN to update the AIRCRAFT table’s AC\_TTAF, AC\_TTEL, and AC\_TTER values.

SQL statement:

GO

CREATE TRIGGER trg\_charter\_hours

ON CHARTER

AFTER INSERT

NOT FOR REPLICATION

AS

BEGIN

UPDATE AIRCRAFT SET

AC\_TTAF = AC\_TTAF + (SELECT CHAR\_HOURS\_FLOWN FROM inserted) WHERE AIRCRAFT.AC\_NUMBER = (SELECT AC\_NUMBER FROM inserted)

UPDATE AIRCRAFT SET

AC\_TTEL = AC\_TTEL + (SELECT CHAR\_HOURS\_FLOWN FROM inserted) WHERE AIRCRAFT.AC\_NUMBER = (SELECT AC\_NUMBER FROM inserted)

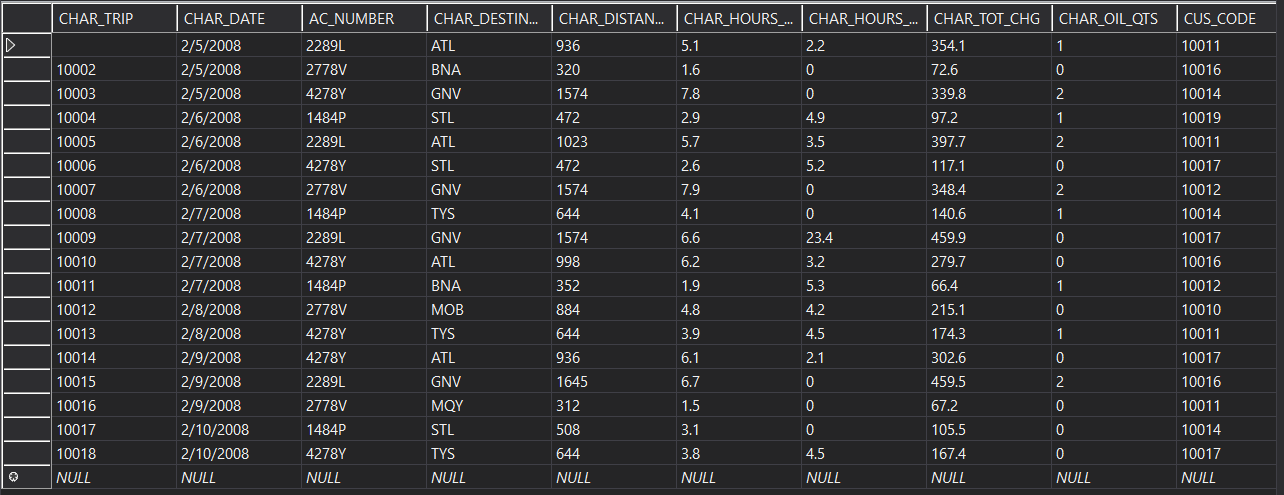
UPDATE AIRCRAFT SET

AC\_TTER = AC\_TTER + (SELECT CHAR\_HOURS\_FLOWN FROM inserted) WHERE AIRCRAFT.AC\_NUMBER = (SELECT AC\_NUMBER FROM inserted)

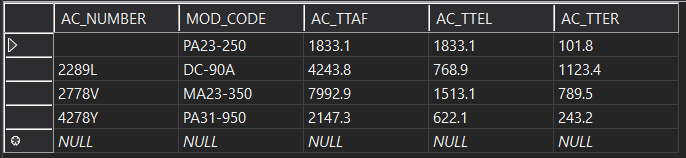
END

BEFORE:

CHARTER:

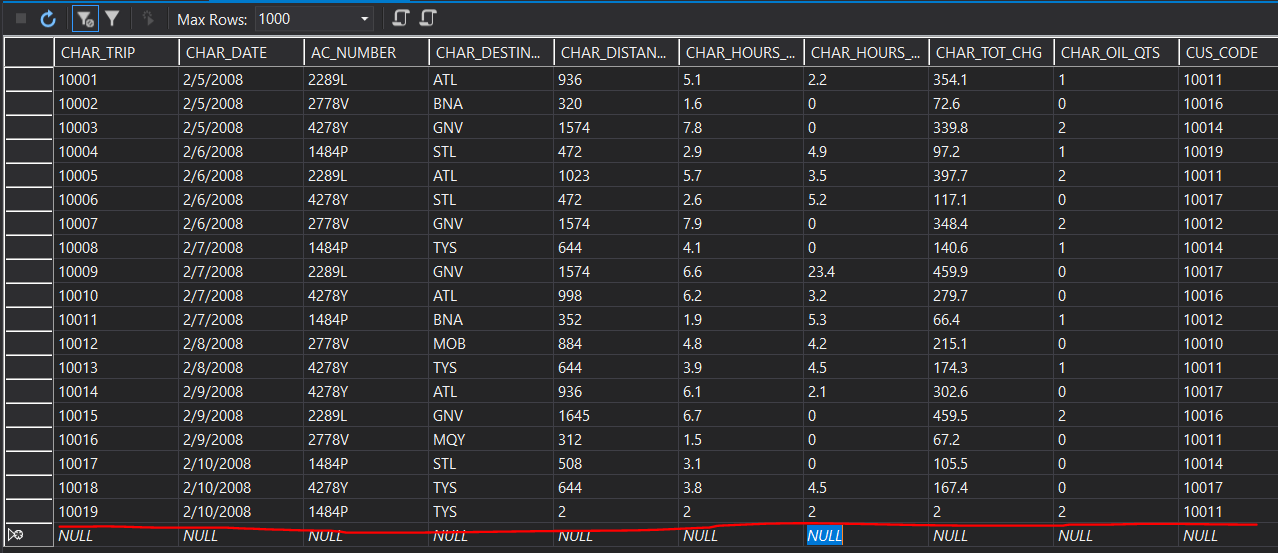


AIRCRAFT:

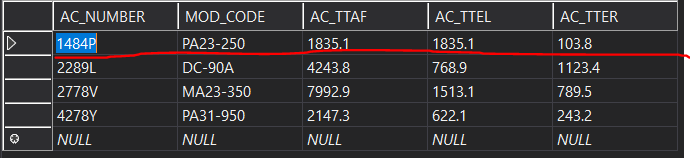


AFTER:

CHARTER:



AIRCRAFT:



1. Create a trigger named trg\_cust\_balance that will automatically update the AC\_CUSTOMER table’s CUS\_BALANCE before a new CHARTER row is added. Use the CHARTER table’s CHAR\_TOT\_CHG as the update source (Assume that all charter charges are charged to the customer balance.) In addition to the CHAR\_TOT\_CHG, add $25 for every quart of oil

used on the charter.

SQL statement:

GO

CREATE TRIGGER trg\_cust\_balance

ON CHARTER

AFTER INSERT

NOT FOR REPLICATION

AS

BEGIN

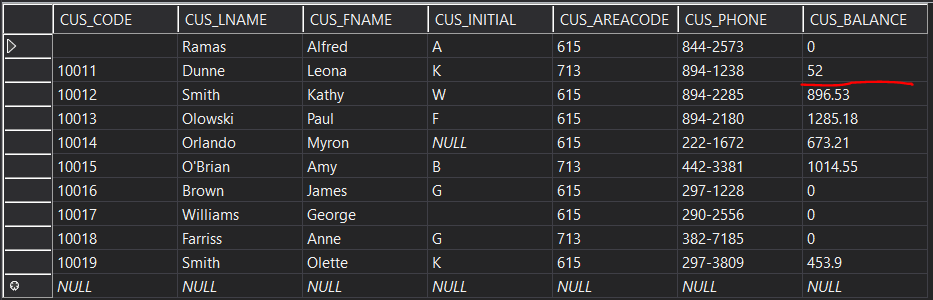
UPDATE AC\_CUSTOMER SET

CUS\_BALANCE = (SELECT (CHAR\_TOT\_CHG + (25\*CHAR\_OIL\_QTS)) FROM inserted)

WHERE AC\_CUSTOMER.CUS\_CODE = (SELECT CUS\_CODE FROM inserted)

END

After adding a row from previous question with cus\_number 10011:



1. Create a stored procedure to update model charge per mile attribute. Procedure takes the model number as a parameter. The procedure increases the charge for this model by 25%.

SQL statement:

GO

CREATE PROCEDURE increase\_MODEL\_CHG\_MILE @MOD\_CODE varchar(10)

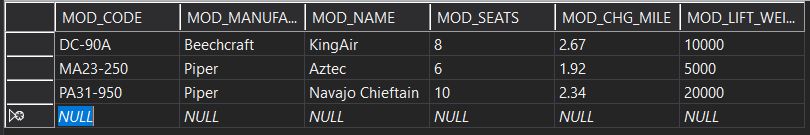
AS

BEGIN

UPDATE MODEL SET MOD\_CHG\_MILE = (1.25 \* MOD\_CHG\_MILE) WHERE MODEL.MOD\_CODE = @MOD\_CODE

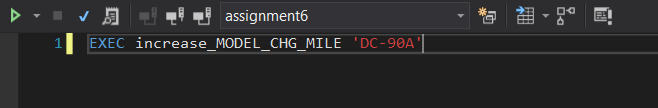
END

BEFORE:

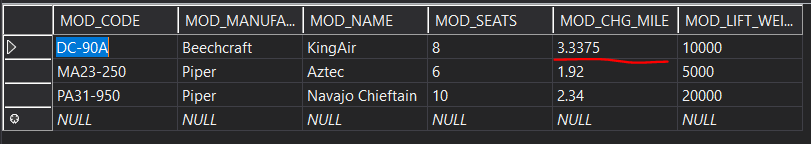


Execution query example:

EXEC increase\_MODEL\_CHG\_MILE 'DC-90A'



AFTER:



1. Create a stored procedure that will take an Employee number and percentage, then update the corresponding employee’s hourly salary by the input percentage (increase the hourly salary, so you are giving the employee a raise).

**Hint**: A*lter Employee table to add the hourly\_salary field, update it with a value of 30 for all rows in the table, before creating the procedure.*

SQL statement:

GO

ALTER TABLE EMPLOYEE ADD

hourly\_salary float

GO

UPDATE EMPLOYEE SET hourly\_salary = 30

GO

CREATE PROCEDURE increase\_EMPLOYEE\_hourly\_salary @EMP\_NUM int, @percentage int

AS

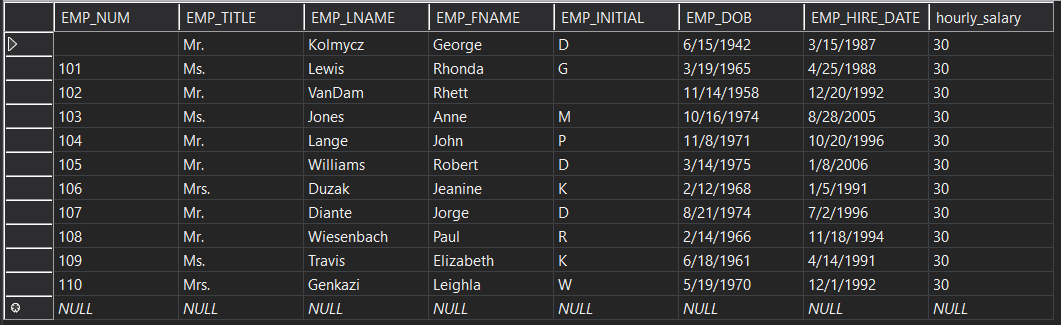
BEGIN

UPDATE EMPLOYEE SET hourly\_salary = hourly\_salary + (hourly\_salary \* @percentage /100)

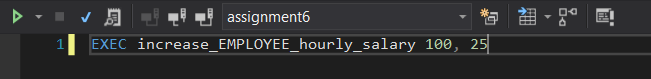
WHERE EMPLOYEE.EMP\_NUM = @EMP\_NUM

END

BEFORE:



Execution query example:



AFTER:

