JOSH A11

USE CIS31032

CREATE TABLE PILOTDIM

(

PILOTID INT IDENTITY(1,1) NOT NULL,

EMP\_NUM INT NOT NULL,

EMP\_TITLE NVARCHAR(4),

EMP\_LNAME NVARCHAR(15),

PIL\_LICENSE NVARCHAR(25),

PIL\_RATINGS NVARCHAR(25)

)

CREATE TABLE CUSTOMERDIM

(

CUSTOMERID INT IDENTITY(1,1) NOT NULL,

CUS\_CODE INT NOT NULL,

CUS\_LNAME NVARCHAR(15),

CUS\_FNAME NVARCHAR(15)

)

CREATE TABLE TIMEDIM

(

TIMEID INT IDENTITY(1,1) NOT NULL,

CHARTER\_DATE DATETIME,

DAY\_NUM INT,

WEEK\_NUM INT,

MONTH\_NUM INT,

QUARTER\_NUM INT,

YEAR\_NUM INT

)

CREATE TABLE MODELDIM

(

MODELID INT IDENTITY(1,1) NOT NULL,

MOD\_CODE NVARCHAR(10) NOT NULL,

MOD\_MANUFACTURER NVARCHAR(10),

MOD\_NAME NVARCHAR(10),

MOD\_SEATS FLOAT,

MOD\_CHG\_MILE REAL

)

CREATE TABLE FACT

(

PILOTID INT NOT NULL,

CUSTOMERID INT NOT NULL,

TIMEID INT NOT NULL,

MODELID INT NOT NULL,

DISTANCE FLOAT,

HOURS\_FLOWN FLOAT,

FUEL\_GALLONS FLOAT,

OIL\_QTS FLOAT,

COST REAL

)

ALTER TABLE PILOTDIM

ADD CONSTRAINT [PK\_PILOTDIM] PRIMARY KEY (PILOTID)

ALTER TABLE CUSTOMERDIM

ADD CONSTRAINT [PK\_CUSTOMERDIM] PRIMARY KEY (CUSTOMERID)

ALTER TABLE TIMEDIM

ADD CONSTRAINT [PK\_TIMEDIM] PRIMARY KEY (TIMEID)

ALTER TABLE MODELDIM

ADD CONSTRAINT [PK\_MODELDIM] PRIMARY KEY (MODELID)

ALTER TABLE FACT

ADD CONSTRAINT [FK\_PILOT] FOREIGN KEY (PILOTID) REFERENCES PILOTDIM,

CONSTRAINT [FK\_CUSTOMER] FOREIGN KEY (CUSTOMERID) REFERENCES CUSTOMERDIM,

CONSTRAINT [FK\_TIME] FOREIGN KEY (TIMEID) REFERENCES TIMEDIM,

CONSTRAINT [FK\_MODEL] FOREIGN KEY (MODELID) REFERENCES MODELDIM

ALTER TABLE FACT

ADD PRIMARY KEY (PILOTID, CUSTOMERID, TIMEID, MODELID)

SELECT \*

FROM PILOTDIM

SELECT \*

FROM CUSTOMERDIM

SELECT \*

FROM TIMEDIM

SELECT \*

FROM MODELDIM

SELECT \*

FROM FACT

--CREATION OF STAGETABLE

CREATE TABLE STAGETABLE

(

PILOTID INT,

CUSTOMERID INT,

MODELID INT,

TIMEID INT,

CHAR\_DISTANCE FLOAT,

CHAR\_HOURS\_FLOWN FLOAT,

CHAR\_FUEL\_GALLONS FLOAT,

CHAR\_OIL\_QTS FLOAT,

MOD\_CHG\_MILE REAL,

CUS\_CODE INT,

CHARTER\_DATE DATETIME,

MOD\_CODE INT,

EMP\_NUM INT,

)

EXEC A11

USE [cis31032]

GO

/\*\*\*\*\*\* Object: StoredProcedure [dbo].[A11] Script Date: 04/21/2011 20:01:54 \*\*\*\*\*\*/

SET ANSI\_NULLS ON

GO

SET QUOTED\_IDENTIFIER ON

GO

-- =============================================

-- Author: <Author,,Name>

-- Create date: <Create Date,,>

-- Description: <Description,,>

-- =============================================

ALTER PROCEDURE [dbo].[A11]

AS

BEGIN

-- SET NOCOUNT ON added to prevent extra result sets from

-- interfering with SELECT statements.

SET NOCOUNT ON;

--PLACING INFO INTO DIMENSION TABLES

INSERT INTO PILOTDIM

SELECT P.EMP\_NUM, E.EMP\_TITLE, E.EMP\_LNAME, P.PIL\_LICENSE, P.PIL\_RATINGS

FROM EMPLOYEE E INNER JOIN PILOT P ON E.EMP\_NUM = P.EMP\_NUM

INSERT INTO CUSTOMERDIM

SELECT CUS\_CODE, CUS\_LNAME, CUS\_FNAME

FROM CUSTOMER

INSERT INTO TIMEDIM (CHARTER\_DATE, YEAR\_NUM, MONTH\_NUM, DAY\_NUM, WEEK\_NUM, QUARTER\_NUM)

SELECT DISTINCT CHAR\_DATE, YEAR(CHAR\_DATE), MONTH(CHAR\_DATE), DAY(CHAR\_DATE), DATEPART(WEEK, CHAR\_DATE),

DATEPART(QUARTER, CHAR\_DATE)

FROM CHARTER

INSERT INTO MODELDIM

SELECT MOD\_CODE, MOD\_MANUFACTURER, MOD\_NAME, MOD\_SEATS, MOD\_CHG\_MILE

FROM MODEL

-- TURN OFF CONSTRAINTS

ALTER TABLE FACT DROP CONSTRAINT FK\_PILOT

ALTER TABLE FACT DROP CONSTRAINT FK\_CUSTOMER

ALTER TABLE FACT DROP CONSTRAINT FK\_TIME

ALTER TABLE FACT DROP CONSTRAINT FK\_MODEL

ALTER TABLE PILOTDIM NOCHECK CONSTRAINT ALL

ALTER TABLE CUSTOMERDIM NOCHECK CONSTRAINT ALL

ALTER TABLE TIMEDIM NOCHECK CONSTRAINT ALL

ALTER TABLE MODELDIM NOCHECK CONSTRAINT ALL

--REMOVE ALL ROWS

TRUNCATE TABLE FACT

TRUNCATE TABLE PILOTDIM

TRUNCATE TABLE CUSTOMERDIM

TRUNCATE TABLE TIMEDIM

TRUNCATE TABLE MODELDIM

--TURN ON CONSTRAINTS AGAIN

ALTER TABLE PILOTDIM CHECK CONSTRAINT ALL

ALTER TABLE CUSTOMERDIM CHECK CONSTRAINT ALL

ALTER TABLE TIMEDIM CHECK CONSTRAINT ALL

ALTER TABLE MODELDIM CHECK CONSTRAINT ALL

ALTER TABLE FACT CHECK CONSTRAINT ALL

ALTER TABLE FACT

ADD CONSTRAINT [FK\_PILOT] FOREIGN KEY (PILOTID) REFERENCES PILOTDIM,

CONSTRAINT [FK\_CUSTOMER] FOREIGN KEY (CUSTOMERID) REFERENCES CUSTOMERDIM,

CONSTRAINT [FK\_TIME] FOREIGN KEY (TIMEID) REFERENCES TIMEDIM,

CONSTRAINT [FK\_MODEL] FOREIGN KEY (MODELID) REFERENCES MODELDIM

--INSERTS TRANSACTIONAL DATA INTO STAGETABLE

INSERT INTO STAGETABLE (CHAR\_DISTANCE, CHAR\_HOURS\_FLOWN, CHAR\_FUEL\_GALLONS, CHAR\_OIL\_QTS, CUS\_CODE, CHARTER\_DATE, MOD\_CODE, EMP\_NUM, MOD\_CHG\_MILE)

SELECT CH.CHAR\_DISTANCE, CH.CHAR\_HOURS\_FLOWN, CH.CHAR\_FUEL\_GALLONS, CH.CHAR\_OIL\_QTS, C.CUS\_CODE, CH.CHAR\_DATE, M.MOD\_CODE, P.EMP\_NUM, M.MOD\_CHG\_MILE

FROM CUSTOMER C INNER JOIN CHARTER CH ON C.CUS\_CODE = CH.CUS\_CODE

INNER JOIN AIRCRAFT A ON CH.AC\_NUMBER = A.AC\_NUMBER

INNER JOIN MODEL M ON A.MOD\_CODE = M.MOD\_CODE

INNER JOIN CREW CR ON CH.CHAR\_TRIP = CR.CHAR\_TRIP

INNER JOIN PILOT P ON CR.EMP\_NUM = P.EMP\_NUM

--UPDATE STAGETABLE TO ASSIGN DATAWAREHOUSE KEYS

UPDATE STAGETABLE

SET PILOTID = P.PILOTID

FROM STAGETABLE S INNER JOIN PILOTDIM P ON S.EMP\_NUM = P.EMP\_NUM

UPDATE STAGETABLE

SET CUSTOMERID = C.CUSTOMERID

FROM STAGETABLE S INNER JOIN CUSTOMERDIM C ON S.CUS\_CODE = C.CUS\_CODE

UPDATE STAGETABLE

SET TIMEID = T.TIMEID

FROM STAGETABLE S INNER JOIN TIMEDIM T ON S.CHARTER\_DATE = T.CHARTER\_DATE

UPDATE STAGETABLE

SET MODELID = M.MODELID

FROM STAGETABLE S INNER JOIN MODELDIM M ON S.MOD\_CODE = M.MOD\_CODE

--POPULATE FACT TABLE

INSERT INTO FACT

SELECT PILOTID, MODELID, TIMEID, CUSTOMERID, CHAR\_DISTANCE, CHAR\_HOURS\_FLOWN, CHAR\_FUEL\_GALLONS, CHAR\_OIL\_QTS, (CHAR\_DISTANCE \* MOD\_CHG\_MILE) AS COST

FROM STAGETABLE

END