```sql
-- Turner Barnett
-- CIS310-02
-- A10
-- Due: 12/6/2017 before midnight

--1

CREATE TABLE PRODUCTDIM (
    PRODUCTID   VARCHAR(15) NOT NULL,
    PROD_SKU    VARCHAR(15) NOT NULL,
    PROD_DESCRIPT   VARCHAR(255),
    PROD_TYPE   VARCHAR(255),
    BRAND_ID    NUMERIC(4,0),
    BRAND_NAME  VARCHAR(100) NOT NULL,
    BRAND_TYPE  VARCHAR(20)
);

CREATE TABLE TIMEDIM (
    TIMEID  NUMERIC(4,0) NOT NULL,
    INV_DATE    DATE,
    YEAR    DATE,
    MONTH   DATE,
    QUARTER DATE
);

CREATE TABLE FACT (
    CUSTOMERID  NUMERIC NOT NULL,
    TIMEID      NUMERIC(4,0) NOT NULL,
    PRODUCTID   VARCHAR(15) NOT NULL,
    EMPLOYEEID NUMERIC NOT NULL,
    LINE_QTY    NUMERIC,
    LINE_PRICE  NUMERIC(8,2)
);

CREATE TABLE CUSTOMERDIM (
    CUSTOMERID  NUMERIC NOT NULL,
    CUST_CODE   NUMERIC(38,0),
    CUST_FNAME  VARCHAR(20),
    CUST_LNAME  VARCHAR(20),
    CUST_STREET VARCHAR(70),
    CUST_CITY   VARCHAR(50),
    CUST_STATE  CHAR(2),
    CUST_ZIP    CHAR(5)
);

CREATE TABLE EMPLOYEEDIM (
    EMPLOYEEID  NUMERIC NOT NULL,
    EMP_NUM     NUMERIC(6,0),
    EMP_FNAME   VARCHAR(20) NOT NULL,
    EMP_LNAME   VARCHAR(25) NOT NULL,
    DEPT_NUM    NUMERIC,
    DEPT_NAME   VARCHAR(50) NOT NULL
);

ALTER TABLE PRODUCTDIM
ADD CONSTRAINT PK_PRODUCTDIM PRIMARY KEY(PRODUCTID)

ALTER TABLE TIMEDIM
ADD CONSTRAINT PK_TIMEDIM PRIMARY KEY(TIMEID)

ALTER TABLE CUSTOMERDIM
ADD CONSTRAINT PK_CUSTOMERID PRIMARY KEY(CUSTOMERID)

ALTER TABLE EMPLOYEEDIM
ADD CONSTRAINT PK_EMPLOYEEID PRIMARY KEY(EMPLOYEEID)

ALTER TABLE FACT
ADD CONSTRAINT PK_FACT PRIMARY KEY(CUSTOMERID,EMPLOYEEID,TIMEID,PRODUCTID),
    CONSTRAINT FK_FACT_CUSTOMERDIM FOREIGN KEY (CUSTOMERID) REFERENCES CUSTOMERDIM,
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70          CONSTRAINT FK_FACT_TIMEDIM FOREIGN KEY (TIMEID) REFERENCES TIMEDIM,
71          CONSTRAINT FK_FACT_EMPLOYEEDIM FOREIGN KEY (EMPLOYEEID) REFERENCES EMPLOYEEDIM,
72          CONSTRAINT FK_FACT_PRODUCTDIM FOREIGN KEY (PRODUCTID) REFERENCES PRODUCTDIM
73
74
75
76
77      DROP TABLE PRODUCTDIM
78      DROP TABLE CUSTOMERDIM
79      DROP TABLE EMPLOYEEDIM
80      DROP TABLE FACT
81      DROP TABLE TIMEDIM
82
83      TRUNCATE TABLE PRODUCTDIM
84      TRUNCATE TABLE CUSTOMERDIM
85      TRUNCATE TABLE EMPLOYEEDIM
86      TRUNCATE TABLE FACT
87      TRUNCATE TABLE TIMEDIM
88
89      -- 2
90
91      CREATE PROCEDURE POPULATE
92
93          AS BEGIN
94          INSERT INTO CUSTOMERDIM VALUES ('1','126','Toys Galore','','28 Laketon
                St.','Fullton','CA','90085')
95          INSERT INTO CUSTOMERDIM VALUES ('2','260','Brookings Direct','','452 Columbus
                Dr.','Grove','CA','90092')
96          INSERT INTO CUSTOMERDIM VALUES ('3','334','The Everything Shop','','342 Magee
                St.','Congaree','CA','90097')
97          INSERT INTO CUSTOMERDIM VALUES ('4','386','Johnson''s Department Store','','123
                Main St.','Northfield','Ca','90098')
98          INSERT INTO CUSTOMERDIM VALUES ('5','440','Grove Historical Museum Store','','3456
                Central Ave.','Fullton','CA','90085')
99          INSERT INTO CUSTOMERDIM VALUES ('6','502','Cards and More','','167 Hale
                St.','Mesa','CA','90104')
100         INSERT INTO CUSTOMERDIM VALUES ('7','586','Almondton General Store','','3345 Devon
                Ave.','Almondton','CA','90125')
101         INSERT INTO CUSTOMERDIM VALUES ('8','665','Cricket Gift Shop','','372 Oxford
                St.','Grove','CA','90092')
102         INSERT INTO CUSTOMERDIM VALUES ('9','713','Cress Store','','12 Rising Sun
                Ave.','Congaree','CA','90097')
103         INSERT INTO CUSTOMERDIM VALUES ('10','796','Unique Gifts','','786 Passmore
                St.','Northfield','CA','90098')
104         INSERT INTO CUSTOMERDIM VALUES ('11','824','Kline''s','','945 Gilham
                St.','Mesa','CA','90104')
105         INSERT INTO CUSTOMERDIM VALUES ('12','893','All Season Gifts','','382 Wildwood
                Ave.','Fullton','CA','90085')
106
107         INSERT INTO FACT VALUES ('','','','5','$86.99')
108         INSERT INTO FACT VALUES ('','','','25','$10.95')
109         INSERT INTO FACT VALUES ('','','','10','$13.99')
110         INSERT INTO FACT VALUES ('','','','5','$104.95')
111         INSERT INTO FACT VALUES ('','','','1','$124.95')
112         INSERT INTO FACT VALUES ('','','','4','$115.99')
113         INSERT INTO FACT VALUES ('','','','3','$116.95')
114         INSERT INTO FACT VALUES ('','','','2','$121.95')
115         INSERT INTO FACT VALUES ('','','','5','$29.95')
116         INSERT INTO FACT VALUES ('','','','12','$36.95')
117         INSERT INTO FACT VALUES ('','','','10','$13.10')
118         INSERT INTO FACT VALUES ('','','','8','$45.79')
119
120         INSERT INTO TIMEDIM VALUES ('1','10/12/2015','','','')
121         INSERT INTO TIMEDIM VALUES ('2','10/13/2015','','','')
122         INSERT INTO TIMEDIM VALUES ('3','10/15/2015','','','')
123         INSERT INTO TIMEDIM VALUES ('4','10/16/2015','','','')
124
125         INSERT INTO PRODUCTDIM VALUES ('1','AH74','Patience','GME','','','')
126         INSERT INTO PRODUCTDIM VALUES ('2','BR23','Patience','GME','','','')
```

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127         INSERT INTO PRODUCTDIM VALUES ('3','CD33','Patience','TOY','','','')
128         INSERT INTO PRODUCTDIM VALUES ('4','DL51','Patience','TOY','','','')
129         INSERT INTO PRODUCTDIM VALUES ('5','DR67','Patience','PZL','','','')
130         INSERT INTO PRODUCTDIM VALUES ('6','DW23','Patience','GME','','','')
131         INSERT INTO PRODUCTDIM VALUES ('7','FD11','Patience','TOY','','','')
132         INSERT INTO PRODUCTDIM VALUES ('8','FH24','Patience','PZL','','','')
133         INSERT INTO PRODUCTDIM VALUES ('9','KA12','Patience','GME','','','')
134         INSERT INTO PRODUCTDIM VALUES ('10','KD34','Patience','PZL','','','')
135         INSERT INTO PRODUCTDIM VALUES ('11','KL78','Patience','GME','','','')
136         INSERT INTO PRODUCTDIM VALUES ('12','MT03','Patience','PZL','','','')
137         INSERT INTO PRODUCTDIM VALUES ('13','NL89','Patience','TOY','','','')
138         INSERT INTO PRODUCTDIM VALUES ('14','TR40','Patience','GME','','','')
139         INSERT INTO PRODUCTDIM VALUES ('15','TW35','Patience','TOY','','','')
140
141
142
143
144
145         END
146         GO
147
148 -- 3
149
150 -- 4
151 SELECT TOP 5 PROD_DESCRIPT, SUM([LINE_QTY]*[LINE_PRICE]) AS SALES
152 FROM PRODUCTDIM INNER JOIN FACT ON PRODUCTDIM.PRODUCTID = FACT.PRODUCTID
153 GROUP BY PROD_DESCRIPT
154 ORDER BY SALES
155
156 -- 5
157 SELECT TOP 1 EMP_FNAME, EMP_LNAME, SUM([LINE_QTY]*[LINE_PRICE]) AS SALES
158 FROM EMPLOYEEDIM INNER JOIN FACT ON EMPLOYEEDIM.EMPLOYEEID = FACT.EMPLOYEEID
159 GROUP BY EMP_FNAME,EMP_LNAME
160 ORDER BY SALES
161
162 -- 6
163 SELECT CUST_CITY AS CITY, BRAND_NAME, SUM([LINE_QTY]*[LINE_PRICE]) AS SALES
164 FROM CUSTOMERDIM LEFT OUTER JOIN FACT ON CUSTOMERDIM.CUSTOMERID = FACT.CUSTOMERID
165     LEFT OUTER JOIN PRODUCTDIM ON PRODUCTDIM.PRODUCTID = FACT.PRODUCTID
166 GROUP BY CUST_CITY, BRAND_NAME
167
168 -- 7
169 SELECT CUST_LNAME, CUST_FNAME, PRODUCT_DESCRIPT AS PRODUCT
170 FROM (
171         SELECT
172
173
```