This file contains generated SQL QUERIES OF STAR SCHEMA AND SNOWFLAKE SCHEMA.

• SQL CODE FOR STAR SCHEMA :

CREATE TABLE PROMOTION (
PROMOTION_KEY NUMERIC NOT NULL, PROMOTION_CODE INTEGER, PROMOTION_TYPE VARCHAR(30) NOT NULL, PROMOTION_MEDIUM VARCHAR(30) NOT NULL, DISCOUNT_RATE DECIMAL(2,2),
CONSTRAINT PROMOTION_KEY PRIMARY KEY (PROMOTION_KEY)
);
CREATE TABLE TIME (
TIME_KEY NUMERIC NOT NULL, DATE DATE NOT NULL, DAY_NUMBER INTEGER,
DAY_OF_WEEK VARCHAR(9) NOT NULL, WEEK_NUMBER INTEGER NOT NULL,
MONTH_NUMBER INTEGER, FISCAL_PERIOD VARCHAR NOT NULL, MONTH INTEGER NOT NULI QUARTER VARCHAR,
YEAR VARCHAR NOT NULL,
CONSTRAINT TIME_KEY PRIMARY KEY (TIME_KEY)
);

CREATE TABLE STORE (STORE_KEY NUMERIC NOT NULL, STORE_NAME VARCHAR(50) NOT NULL, MANAGER_NAME VARCHAR(50) NOT NULL, STORE_CODE NUMERIC NOT NULL, ADDRESS VARCHAR(100) NOT NULL, STATE VARCHAR(20) NOT NULL, ZIP NUMERIC(6) NOT NULL, CONSTRAINT STORE_KEY PRIMARY KEY (STORE_KEY)); CREATE TABLE PRODUCT (PRODUCT_KEY NUMERIC NOT NULL, PRODUCT_NAME VARCHAR(50) NOT NULL, PRODUCT_CODE NUMERIC NOT NULL, PRODUCT_LINE LONGVARCHAR, BRAND VARCHAR(30) NOT NULL, DEPARTMENT VARCHAR(10) NOT NULL, CONSTRAINT PRODUCT_KEY PRIMARY KEY (PRODUCT_KEY)); CREATE TABLE SALES_FACT (PRODUCT_KEY NUMERIC NOT NULL, TIME_KEY NUMERIC NOT NULL, PROMOTION_KEY NUMERIC NOT NULL, STORE_KEY NUMERIC NOT NULL, SOLD_QUANTITY INTEGER NOT NULL, GROSS_SALES FLOAT NOT NULL, NET_SALES FLOAT NOT NULL,

SIDRAH KHAN

B1-16

COST NUMERIC(10,2) NOT NULL, STORE_COUPON_AMT DECIMAL NOT NULL, MFR COUPON AMOUNT DECIMAL NOT NULL); ALTER TABLE SALES_FACT ADD CONSTRAINT PROMOTION_SALES_FACT_fk FOREIGN KEY (PROMOTION_KEY) REFERENCES PROMOTION (PROMOTION_KEY) ON DELETE NO ACTION ON UPDATE NO ACTION NOT DEFERRABLE; ALTER TABLE SALES_FACT ADD CONSTRAINT TIME_SALES_FACT_fk FOREIGN KEY (TIME_KEY) REFERENCES TIME (TIME_KEY) ON DELETE NO ACTION ON UPDATE NO ACTION NOT DEFERRABLE; ALTER TABLE SALES_FACT ADD CONSTRAINT STORE_SALES_FACT_fk FOREIGN KEY (STORE_KEY) REFERENCES STORE (STORE_KEY) ON DELETE NO ACTION ON UPDATE NO ACTION NOT DEFERRABLE; ALTER TABLE SALES_FACT ADD CONSTRAINT PRODUCT_SALES_FACT_fk FOREIGN KEY (PRODUCT_KEY) REFERENCES PRODUCT (PRODUCT_KEY) ON DELETE NO ACTION

• SQL QUERY OF SNOWFLAKE SCHEMA:

ON UPDATE NO ACTION NOT DEFERRABLE;

CREATE TABLE QUARTER (

SIDRAH KHAN B1-16

QUART_ID NUMERIC NOT NULL, QUARTER VARCHAR,
FISCAL_PERIOD VARCHAR NOT NULL,
CONSTRAINT QUART_ID PRIMARY KEY (QUART_ID)
);
CREATE TABLE ADDRESS (
ADDRESS_KEY NUMERIC NOT NULL, ZIP NUMERIC(6) NOT NULL, ADDRESS VARCHAR(100) NOT NULL STATE VARCHAR(20) NOT NULL,
CONSTRAINT ADDRESS_KEY PRIMARY KEY (ADDRESS_KEY)
);
CREATE TABLE PROMOTION (
PROMOTION_KEY NUMERIC NOT NULL, PROMOTION_CODE INTEGER, PROMOTION_TYPE VARCHAR(30) NOT NULL, PROMOTION_MEDIUM VARCHAR(30) NOT NULL, DISCOUNT_RATE DECIMAL(2,2),
CONSTRAINT PROMOTION_KEY PRIMARY KEY (PROMOTION_KEY)
);
CREATE TABLE TIME (
TIME_KEY NUMERIC NOT NULL, QUART_ID NUMERIC NOT NULL, DATE DATE NOT NULL, DAY_NUMBER INTEGER,
SIDRAH KHAN

B1-16

DAY_OF_WEEK VARCHAR(9) NOT NULL, WEEK_NUMBER INTEGER NOT NULL, MONTH_NUMBER INTEGER,
MONTH INTEGER NOT NULL, YEAR VARCHAR NOT NULL,
CONSTRAINT TIME_KEY PRIMARY KEY (TIME_KEY)
);
CREATE TABLE STORE (
STORE_KEY NUMERIC NOT NULL, ADDRESS_KEY NUMERIC NOT NULL, STORE_NAME VARCHAR(50) NOT NULL, MANAGER_NAME VARCHAR(50) NOT NULL, STORE_CODE NUMERIC NOT NULL,
CONSTRAINT STORE_KEY PRIMARY KEY (STORE_KEY)
);
CREATE TABLE PRODUCT (
PRODUCT_KEY NUMERIC NOT NULL,
PRODUCT_NAME VARCHAR(50) NOT NULL, PRODUCT_CODE NUMERIC NOT NULL, PRODUCT_LINE LONGVARCHAR,
BRAND VARCHAR(30) NOT NULL, DEPARTMENT VARCHAR(10) NOT NULL,
CONSTRAINT PRODUCT_KEY PRIMARY KEY (PRODUCT_KEY)
);

CREATE TABLE SALES_FACT (

PRODUCT_KEY NUMERIC NOT NULL, TIME_KEY NUMERIC NOT NULL, PROMOTION_KEY NUMERIC NOT NULL, STORE_KEY NUMERIC NOT NULL, SOLD_QUANTITY INTEGER NOT NULL, GROSS_SALES FLOAT NOT NULL, NET_SALES FLOAT NOT NULL,

COST NUMERIC(10,2) NOT NULL, STORE_COUPON_AMT DECIMAL NOT NULL, MFR_COUPON_AMOUNT DECIMAL NOT NULL

);

ALTER TABLE TIME ADD CONSTRAINT QUARTER_TIME_fk FOREIGN KEY (QUART_ID)

REFERENCES QUARTER (QUART_ID) ON DELETE NO ACTION

ON UPDATE NO ACTION NOT DEFERRABLE;

ALTER TABLE STORE ADD CONSTRAINT ADDRESS_STORE_fk FOREIGN KEY (ADDRESS_KEY)

REFERENCES ADDRESS (ADDRESS_KEY) ON DELETE NO ACTION

ON UPDATE NO ACTION NOT DEFERRABLE;

ALTER TABLE SALES_FACT ADD CONSTRAINT PROMOTION_SALES_FACT_fk FOREIGN KEY (PROMOTION_KEY)

REFERENCES PROMOTION (PROMOTION KEY) ON DELETE NO ACTION

ON UPDATE NO ACTION NOT DEFERRABLE;

ALTER TABLE SALES_FACT ADD CONSTRAINT TIME_SALES_FACT_fk FOREIGN KEY (TIME_KEY)
REFERENCES TIME (TIME_KEY) ON DELETE NO ACTION
ON UPDATE NO ACTION NOT DEFERRABLE;

ALTER TABLE SALES_FACT ADD CONSTRAINT STORE_SALES_FACT_fk FOREIGN KEY (STORE_KEY)
REFERENCES STORE (STORE_KEY) ON DELETE NO ACTION
ON UPDATE NO ACTION NOT DEFERRABLE;

ALTER TABLE SALES_FACT ADD CONSTRAINT PRODUCT_SALES_FACT_fk FOREIGN KEY (PRODUCT_KEY)
REFERENCES PRODUCT (PRODUCT_KEY) ON DELETE NO ACTION
ON UPDATE NO ACTION NOT DEFERRABLE;