

## SCHEMA OBJECTS AND TABLES

Background: You need to create a schema objects for the new inventory application.

Tasks:

- Create tables to store data
- Ensure referential integrity through the use of constraints
- Create indexes to improve access to data
- Modify existing tables
- Create views that simplify user access to data

1. In the INVENTORY tablespace, create the PRODUCT\_MASTER table in the INVENTORY schema. The specifications of the table are:

PRODUCT\_ID number(5). This is the primary key field.

PRODUCT\_NAME varchar2(50) with a Not Null constraint.

CODE varchar2(20) with a Not Null constraint.

REORDER\_THRESHOLD number(5) with a check constraint ensuring that the number is always greater than zero.

COST number(5,2)

PRICE number(5,2)

2. In the INVENTORY tablespace create the PRODUCT\_ON\_HAND table in the INVENTORY schema. The specifications of the table are:

ON\_HAND\_ID number(5). This is the primary key field.

PRODUCT\_ID number(5). This field should have a foreign key constraint linking it to the product\_id field in the product\_master table.

QUANTITY number(5)

WAREHOUSE\_CITY varchar2(30)

**3.** In the INVENTORY tablespace create the OBSOLETE\_PRODUCTS table in the INVENTORY schema. The specifications of the table are:

PRODUCT\_ID number(5). This is the primary key field.

PRODUCT\_NAME varchar2(50) with a Not Null constraint.

CODE varchar2(20) with a Not Null constraint.

COST number(5,2)

PRICE number(5,2)

**4.** In the INVENTORY tablespace, create an index on the PRODUCT\_NAME column of the OBSOLETE\_PRODUCTS table in the INVENTORY schema.

**5.** In the INVENTORY tablespace, create an index on the PRODUCT\_NAME and CODE columns of the PRODUCT\_MASTER table in the INVENTORY schema.

**6.** In the INVENTORY tablespace, create an index the PRODUCT\_ID and QUANTITY column of the PRODUCT\_ON\_HAND table in the INVENTORY schema.

**7.** You receive an update for the inventory application that requires you to add two columns to the PRODUCT\_MASTER table. Add a column named PRIMARY\_SOURCE of datatype varchar2 with size 50. Add another column named SECONDARY\_SOURCE of datatype varchar2 with size 50.

**8.** The update for the inventory application also requires you to add a column to the PRODUCT\_ON\_HAND table. Add a column named LAST\_UPDATE of datatype date.

**9.** The update for the inventory application also requires you to add a column to the

OBSOLETE\_PRODUCTS table. Add a column named OBSOLETEED of datatype date.

**10.** You receive another update for the inventory application. This update instructs you to drop the OBSOLETE\_PRODUCTS table and add a column OBSOLETEED to the PRODUCT\_MASTER table with datatype date.

**11.** The second update to the inventory application also instructs you to create a view named WAREHOUSE\_VW in the INVENTORY schema that shows (in order):

- The name of the product
- The amount of the product on hand
- The warehouse city name.