

Diploma Advanced Database Task

Set Up:

Do a find/replace in the Diploma_DB_Task.sql file and replace all XXXX with the last 4 digits of your student number.

Background:

You have been newly hired as the backend specialist on a development team.

The team has a contract with 'Dod & Gy Technology Wholesalers' a bleeding edge technology wholesaler.

The employee whom you are replacing has already done the analysis, designed the database (ERD) and started writing the script to create the database.

The partially complete script includes the DDL to create tables, some example data.

None of the stored procedures have been written yet, however your predecessor (not big on documentation) has included commented procedure signatures / definitions and notes of the required stored procedures for you to work from.

Your immediate job is to complete and test the stored procedures outlined in the script.

These stored procedures will later be used as the basis for a restful API

NOTE: The sample data is deliberately added in a way to demonstrate transaction structure (i.e. interrelatedness) of data in each table, and to show you what needs to be done (usually more than one row is affected) when you add a row to any given table. Be sure to carefully inspect the way the sample data is added to help you understand what needs to happen in each stored procedure you write.

You need to write & test the following stored procedures:

ADD_LOCATION
GET_LOCATION_BY_ID
ADD_PRODUCT
GET_PRODUCT_BY_ID
PURCHASE_STOCK
ADD_CLIENT_ACCOUNT
ADD_AUTHORIZED_PERSON
MAKE_ACCOUNT_PAYMENT
GET_CLIENT_ACCOUNT_BY_ID
CREATE_ORDER
GET_ORDER_BY_ID
ADD_PRODUCT_TO_ORDER
REMOVE_PRODUCT_FROM_ORDER
GET_OPEN_ORDERS
FULLFILL_ORDER

IDENTITY I.E. 'Auto Increment' SEQUENCE SETTINGS

PRODUCTXXXX	:	IDENTITY(10001, 1)
CLIENTACCOUNTXXXX	:	IDENTITY(30001, 1)
AUTHORISEDPERSONXXXX	:	IDENTITY(50001, 1)
ORDERXXXX	:	IDENTITY(70001, 1)

All other tables have manually set or composite borrowed primary keys

EXCEPTION CODES

50000 UNEXPECTED ERROR – pass through the existing error_message()

LOCATION RELATED

51001 DUPLICATE LOCATION ID (ADD_LOCATION)
51002 LOCATION DOES NOT EXIST (GET_LOCATION_BY_ID, PURCHASE_STOCK)

PRODUCT RELATED

52002 PRODUCT DOES NOT EXIST(GET_PRODUCT_BY_ID, PURCHASE_STOCK)

ACCOUNT RELATED

53001 DUPLICATE ACCOUNT NAME (ADD_CLIENT_ACCOUNT)
53002 ACCOUNT DOES NOT EXIST (MAKE_ACCOUNT_PAYMENT,
 GET_CLIENT_ACCOUNT_BY_ID)
53003 INVALID EMAIL ADDRESS (ADD_AUTHORIZED_PERSON)
53004 ACCOUNT PAYMENT AMOUNT MUST BE POSITIVE
 (MAKE_ACCOUNT_PAYMENT)
53005 INSUFFICIENT CREDIT (FULFILL ORDER)

ORDER RELATED

54002 ORDER DOES NOT EXIST
54003 ORDER HAS ALREADY BEEN FULFILLED
54004 DISCOUNT OUT OF RANGE
54005 PRODUCT NOT ON ORDER
54006 INSUFFICIENT INVENTORY TO FULFILL

USER RELATED

55002 USER DOES NOT EXIST (CREATE_ORDER)

GENERAL LEDGER RELATED

59001 INSUFFICIENT CASH (PURCHASE_STOCK)