T-SQL Assignment

You are a database developer for Skillage IT and as such are required to develop some code to achieve some specific requirements of the database. Given the following scenario, please write SQL statements to achieve the requirements listed below.

Situation: Skillage IT has one database on one instance of SQL Server 2008. The database is called SkillageITDB. The database holds data on customers and orders of SkillageIT. The table design is as follows…

Table 1: Name: CustDetails

Columns:

Column Name	Data Type	Key/Index	Nullable
CustRef	int	Key	No
LName	nchar(25)		No
FName	nchar(25)		No
Address	nchar(80)		Yes
Suburb	nchar(25)		Yes
State	nchar(5)		Yes
PCode	nchar(5)		yes

CustRef	LName	FName	Address	Suburb	State	PCode
1	Stevens	Peter	5 Horner Drv	Peston	NSW	2320
2	Clarke	Garry	3 Peak Ave	Eastway	NSW	2312
3	Harvy	Leanne	231 South Rd	Sinter West	NSW	2408
4	Checker	Di	12 First St	Eastway	NSW	2312
5	Peters	Sam	645 Main Rd	Eastway	NSW	2312
6	Stevens	James	U1/15 James St	Sinter East	NSW	2409
7	Yardley	Paul				
8	Smith	Steven	16 Third St	Radison	NSW	2417
9	Jacobson	Henry	300 Arbrie Ave	Lockdon	NSW	2532

Table 2: Name: OrderDetails

Columns:

Column Name	Data Type	Key/Index	nullable
OrderRef	int	Key	No
CustRef	int		No
DateOrdered	date		No
Value	money		No
DateDelivered	date		Yes

OrderRef	CustRef	DateOrdered	Value	DateDelivered
1	2	24/11/2009	$325.80	29/11/2009
2	1	24/11/2009	$1340.45	30/11/2009
3	8	28/11/2009	$988.50	4/12/2009
4	4	1/12/2009	$2205.15	
5	3	6/12/2009	$1540.25	14/12/2009
6	9	6/12/2009	$965.20	15/12/2009
7	9	7/12/2009	$756.50	
8	5	12/12/2009	$309.45	
9	6	13/12/2009	$1327.80	

This assessment requires you to load and configure server tools, and write T-SQL commands to read, enter and adjust data in the database.

It is recommend that the tables are developed using Microsoft SQL Server and/or SSMS, and applying the action requests to the database to ensure correct T-SQL structure and results.

1. **Enter the T-SQL code created into this document for each request below.**
2. **Submit an SQL Query file of the T-SQL Code**
3. **Upload your Database backup file (.mdf/.bak)**

If you have any queries, please speak with your instructor.

1) Write an SQL command that retrieves all the data from the CustDetails table.

_____

_____

2) Write an SQL command that retrieves only the first and last names from the CustDetails table.

_____

_____

3) Write an SQL command that retrieves all the data from the CustDetails table sorting it by the customer's last name.

_____

_____

4) Write an SQL command that retrieves all data on only customers living in Eastway from the CustDetails table.

_____

_____

5) Write an SQL command that retrieves all data on only the first four customers from the CustDetails table.

_____

_____

6) Write an SQL command that retrieves all data on only customers with a last name beginning with 'S' through 'Z' from the CustDetails table.

_____

_____

7) Write an SQL command that retrieves all data on only customers with the text 'east' anywhere in the suburb from the CustDetails table.

_____

_____ 💬 _____

8) Write an SQL command that retrieves only unique last names from the CustDetails table.

_____ _____

_____ 💬 _____

9) Write an SQL command that retrieves all the customer details from the CustDetails table if their address details have been entered.

_____

_____ 💬 _____

10) Write an SQL command that retrieves the total value of orders that have been delivered from the OrderDetails table.

_____ 💬 _____

_____

11) Write an SQL command that retrieves the count of orders in December and their total value from the OrderDetails table.

_____

_____ 💬 _____

12) Write an SQL command that retrieves all data for all orders sorted by customer number from the OrderDetails table.

_____

_____ 💬 _____

13) Write an SQL command that retrieves the Customers last name, first name, suburb and the respective order values which have orders that have been delivered.

_____

_____

14) Write an SQL command that retrieves last name and first name of all customers and the order numbers of orders they have placed.

_____

_____

15) Write an SQL command that uses a subquery to retrieve all customer data for customers that live in a suburb other than where anyone with a last name of "Stevens" lives.

_____

_____

16) Write an SQL command that creates a database that has the following structure:

Table 2: Name: StaffDetails

Columns:

Column Name	Data Type	Key/Index	nullable
StaffRef	int	Key	No
LName	nchar(25)		No
FName	nchar(25)		No
Phone	nchar(25)		Yes
StartDate	date		No

_____

_____

17) Write an SQL command that inserts a record into the StaffDetails database for staff member John Jacobs, reference 52 who started on 2/11/2009.

_____

_____

18) Write an SQL command that updates the OrderDetails table to show order reference 4 as being delivered on 16/12/2009.

_____

_____

19) Write an SQL command that adds a column called "Email" to the StaffDetails table as we also need email details (allow for 50 characters).

_____

_____

20) Write an SQL command that deletes order reference 9 as the customer has cancelled the order.

_____

_____

21) Write an SQL command that creates a view called "Contacts" holding staff last name, first name and phone number as we need a contact list.

_____

_____

22) Write an SQL command that deletes the view "Contacts".

_____

_____

23) Write an SQL command that calls the stored procedure 'AddOrder' passing in 5 parameters as the following order:

1. Order reference: 10
2. Customer reference: 4
3. Date ordered: 16/12/2009
4. Value: $2320.40
5. Date delivered: empty

_____

_____

24) Write an SQL command that creates a stored procedure named 'spCancelOrder' that receives one parameter (OrderRef) and deletes the order from the table.

_____

_____

25) Write an SQL command that creates a trigger called "TblUpdated" that notifies the client using 'raiserror' after the OrderDetails table has been updated.

_____

_____

26) Write an SQL command that utilises a try/catch block dividing 1 by 0 and notifying the client via a RAISERROR call.

_____

_____

27) Write a stored procedure named "spAddPercentage" that adds a percentage (passed as a parameter named "IncPercent") to the value of an order if the value of IncPercent is under 10%, or if IncPercent is 10% or over, add 10% to the value of an order for all orders in the OrderDetails table utilising IF/ELSE.

_____

_____

28) Write an SQL command that generates a stored procedure named 'spCustomerValue' that returns the total value of orders from the OrderDetails table placed by a customer whose reference is passed in as a parameter.

_____

_____

29) Write an SQL statement to create a trigger called "ValidOrder" checking the value of a new order inserted into the OrderDetails table is greater than $100. If the value is less than $100, the entry needs to be rolled back.

_____

_____