

## Introduction to Data Integrity

Sr. No.	Assignment Question																																																				
1.	<p>Saint Clara Insurance (SCI) services is a leading Insurance company based in New York, USA. SCI Services wanted a faster, more accurate, and less expensive way to handle insurance claims adjusting for its insurance company customers. With an ever increasing customer base, they decided to create a web based application that will be used not only by employees who work on field but will also be used by the administrators in the head office.</p> <p>SCI handles approximately 650 claims per month, but that can soar to 15000 or more when a hurricane or some other disaster strikes. Officers can use the software on the device type of their choice: Tablet PCs or laptops in the field, or desktop PCs back in their offices. The use of Microsoft SQL Server 2005 as the software’s database enables to receive and update all the necessary information regarding a customer or claimer.</p> <p>With thousands of customers expected every month, data integrity of the data in the database is very important.</p> <p>1. Create a database called <b>SaintClaraServices</b> to store the details of the company. Create a table <b>CustomerHeader</b> with the following details.</p> <p>➤ CustomerHeader Table</p> <table><tr><th>Field Name</th><th>Data Type</th><th>Key Field</th><th>Description</th></tr><tr><td>ClientID</td><td>Int</td><td>Primary Key</td><td>Stores client id</td></tr><tr><td>FirstName</td><td>Char</td><td></td><td>Stores first name of the client</td></tr><tr><td>LastName</td><td>Char</td><td></td><td>Stores last name of the client</td></tr><tr><td>MiddleName</td><td>Char</td><td></td><td>Stores middle name of the client</td></tr><tr><td>Gender</td><td>Char</td><td></td><td>Stores gender of the client</td></tr><tr><td>DateOfBirth</td><td>DateTime</td><td></td><td>Stores date of birth of the client</td></tr><tr><td>Address</td><td>Varchar(max)</td><td></td><td>Stores address of the client</td></tr><tr><td>MaritalStatus</td><td>Char</td><td></td><td>Stores marital status of the client</td></tr><tr><td>Age</td><td>Int</td><td></td><td>Stores age of the client</td></tr><tr><td>Employment</td><td>Char</td><td></td><td>Stores occupation of the client</td></tr><tr><td>CompanyName</td><td>Varchar(max)</td><td></td><td>Stores the company name</td></tr><tr><td>CompanyAddress</td><td>Varchar(max)</td><td></td><td>Stores the company address</td></tr></table> <p>Table 1.1: CustomerHeader Table</p>	Field Name	Data Type	Key Field	Description	ClientID	Int	Primary Key	Stores client id	FirstName	Char		Stores first name of the client	LastName	Char		Stores last name of the client	MiddleName	Char		Stores middle name of the client	Gender	Char		Stores gender of the client	DateOfBirth	DateTime		Stores date of birth of the client	Address	Varchar(max)		Stores address of the client	MaritalStatus	Char		Stores marital status of the client	Age	Int		Stores age of the client	Employment	Char		Stores occupation of the client	CompanyName	Varchar(max)		Stores the company name	CompanyAddress	Varchar(max)		Stores the company address
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## ➤ CustomerDetails Table

Field Name	Data Type	Key Field	Description
ClientID	Int	Primary Key	Stores client id
FatherName	Char		Stores the name of the client's father
MotherName	Char		Stores the name of the client's mother
Amount	Money		Stores the principal amount
Period	Int		Stores period for insurance
Plan	Char		Stores plan for insurance
Premium	Money		Stores premium
NomineeName	Char		Stores nominee name
Date	DateTime		Stores the date on which insurance is made

Table 1.2: CustomerDetails Table

2. Create a table **CustomerHeader** with the specifications given in Table 1.1. Identify the primary key for this table so that table entries are not duplicated.
3. Write a query to add a foreign key to **CustomerDetails** table.
4. Write a query to accept only two values in the Gender field, 'M' and 'F' and also make the default value of MaritalStatus field as 'Single'.
5. Only customers over the age of 21 are eligible to open a insurance policy at SCI. Write a query, so that customers under the age of 21 are not allowed to make an entry to the database.