Exemple

--- Database(SalesmanagementDB): Customer – Order – Invoice (Access)

Objective

This database is designed to manage the process of sales and billing within a company. It allows users to store customert information, record orders, and generate invoices automatically. ---

Main Tables

(Customer) Table Purpose: Stores information about customers.

Fields:

1. ClientID (Primary Key)
2. ClientName
3. Address
4. City
5. Phone-
6. Email

(Order) Table Purpose: Stores details of client orders.

Fields:

1.OrderID (Primary Key)

2.TotalAmount

3.OrderDate

4.ClientID (Foreign Key linked to Client table)

3. **(Invoice)** Table Purpose: Stores billing information for each order.

Fields:

1.InvoiceID (Primary Key)

2.InvoiceDate

3.PaymentStatus

4.Amount

5.OrderID (Foreign Key linked to Order table)

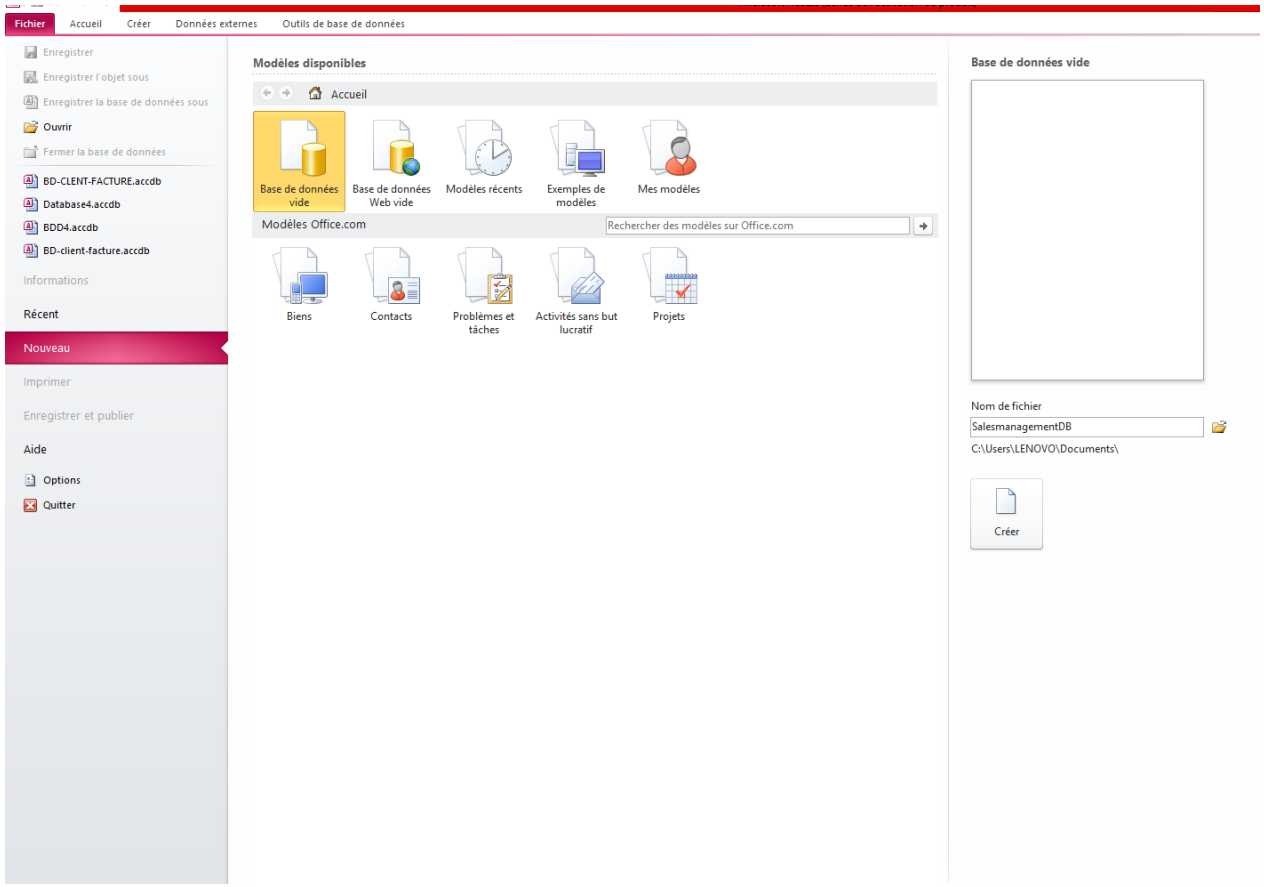
Simple Explanation: Creating a Database, Tables, and Relationships in Access

- 1. Create a New Database Open Microsoft Access. Click on Blank Database
- Write the name of your database, for example: 👉Sales_Management.accdb Click Create.
- Access will open a new empty database file.
- . 2. Create the Tables Each table stores a specific type of data.
- Example in our project:
- Customer Table: stores customer information
- Order Table: stores order information
- Invoice Table: stores invoice information

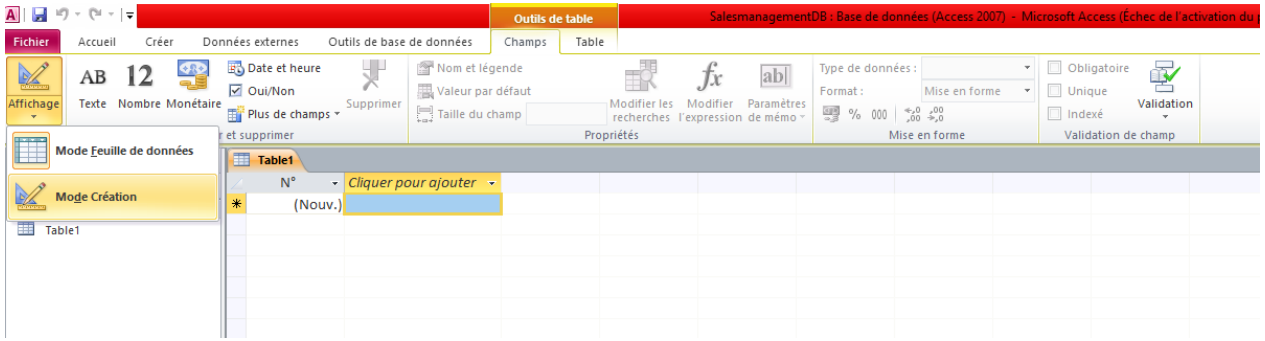
Steps: Go to the Create tab → choose Table Design. Add your fields (columns): Example for customer t table: CustomerID NuméroAuto (Primary Key) customertName → Short Text City → Short Text Phone → Numérique Text Email → Short Text Save the table with the name Customer. Repeat the same for Order and Invoice Table.

- 🔗3. Create Relationships Between Tables Relationships link the tables together using common fields. Steps: Go to the Database Tools tab → click Relationships. Add your three tables: Customer, Order and Invoice.
- Drag CustomerID from Customer Table. to CustomerID in Order Table.. → Choose Enforce Referential Integrity → Click Create. Then drag OrderID from Order Table to OrderID in Invoice Table.. → Click Create again. Save your relationships. Now your database is ready — all tables are connected properly

1. Create a New Database

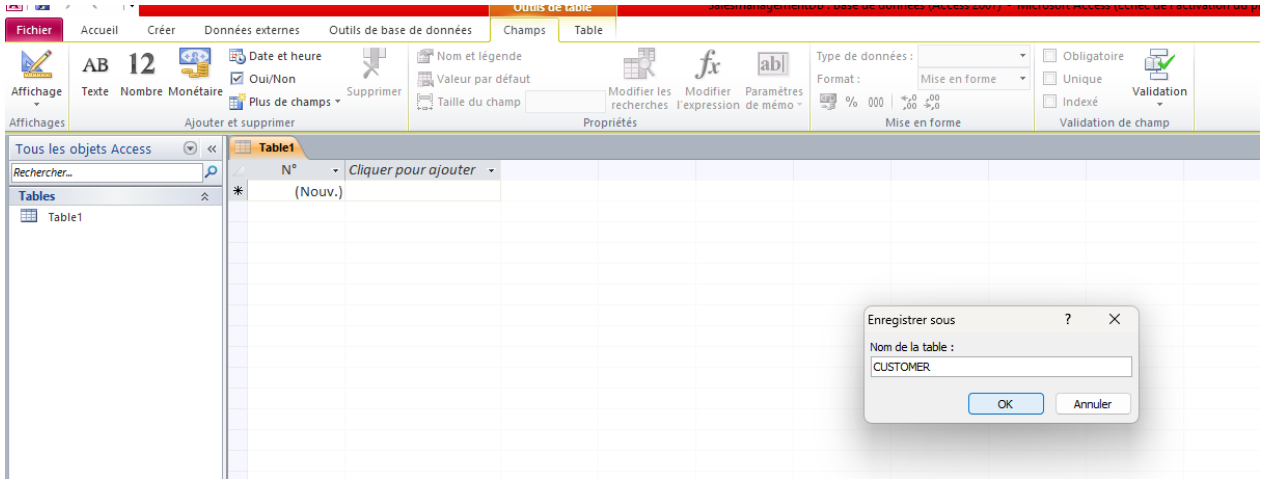


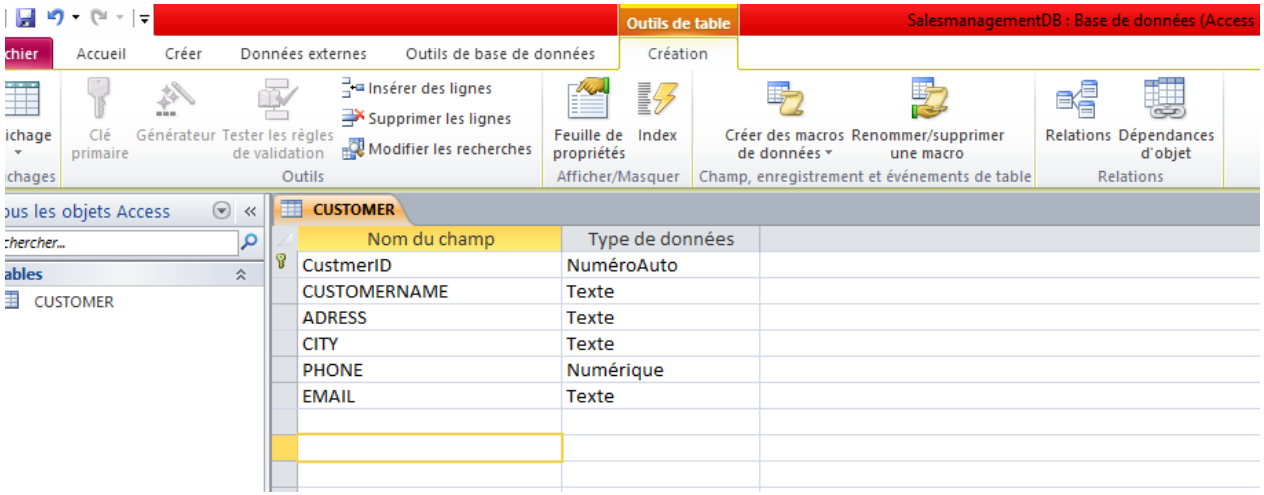
- . 2. Create the Tables Each table stores a specific type of data.

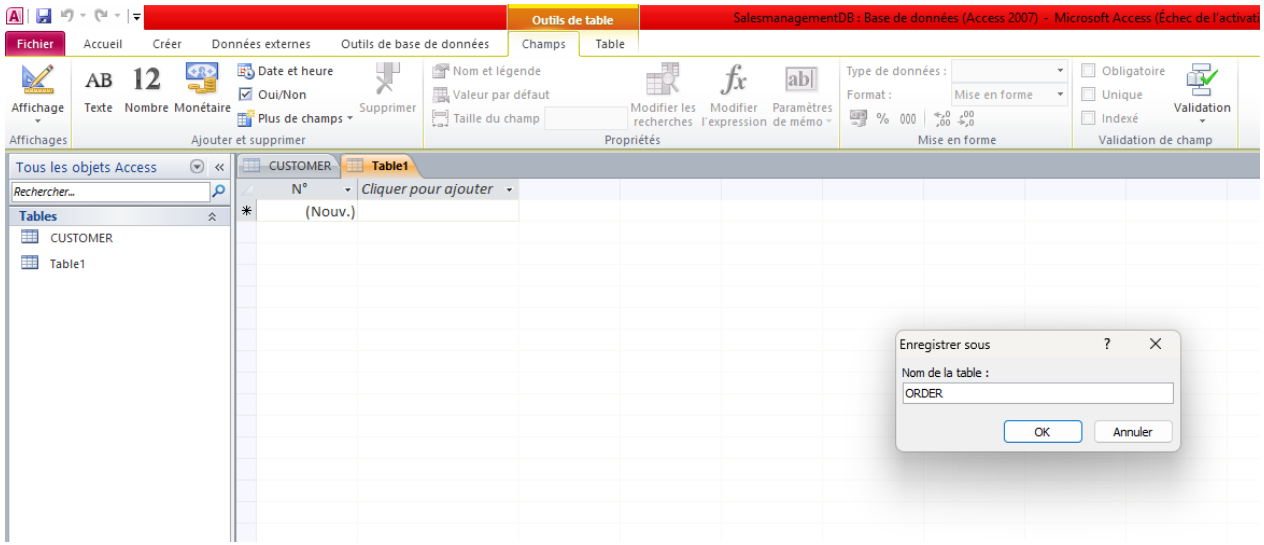


1. (Customer) Table Purpose: Stores information about customers.

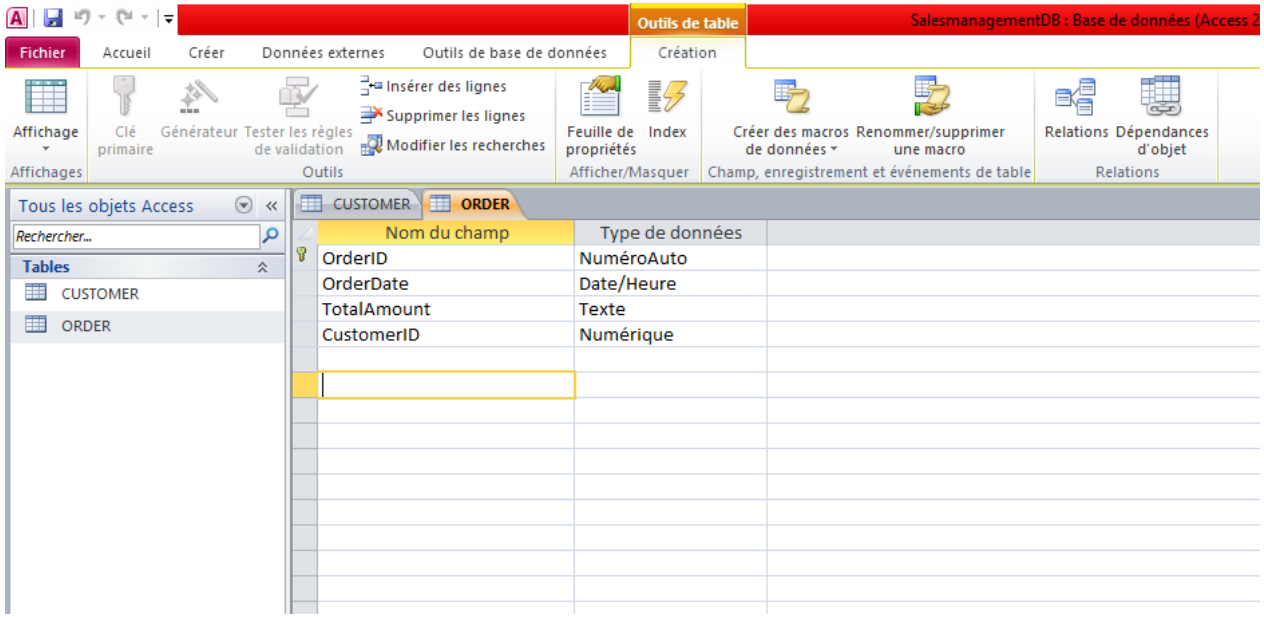
2. Fields: Customer ID (Primary Key) -Customer Name -Address -City -Phone -Email




Outils de table
SalesmanagementDB : Base de données (Access
Accueil
Créer
Données externes
Outils de base de données
Création
Clé primaire
Générateur
Tester les règles de validation
Insérer des lignes
Supprimer les lignes
Modifier les recherches
Outils
Feuille de propriétés
Index
Afficher/Masquer
Créer des macros de données
Renommer/supprimer une macro
Champ, enregistrement et événements de table
Relations
Dépendances d'objet
Relations
Tous les objets Access
Rechercher...
Tables
CUSTOMER
CUSTOMER
Nom du champ
Type de données
CustmerID
NuméroAuto
CUSTOMERNAME
Texte
ADRESS
Texte
CITY
Texte
PHONE
Numérique
EMAIL
Texte



2. (Order) Table Purpose: Stores details of client orders. Fields: OrderID (Primary Key)- OrderDate -ClientID (Foreign Key linked to Client table) -TotalAmount


Outils de table
SalesmanagementDB : Base de données (Access 2
Fichier
Accueil
Créer
Données externes
Outils de base de données
Création
Affichage
Affichages
Clé primaire
Générateur
Tester les règles de validation
Insérer des lignes
Supprimer les lignes
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Index
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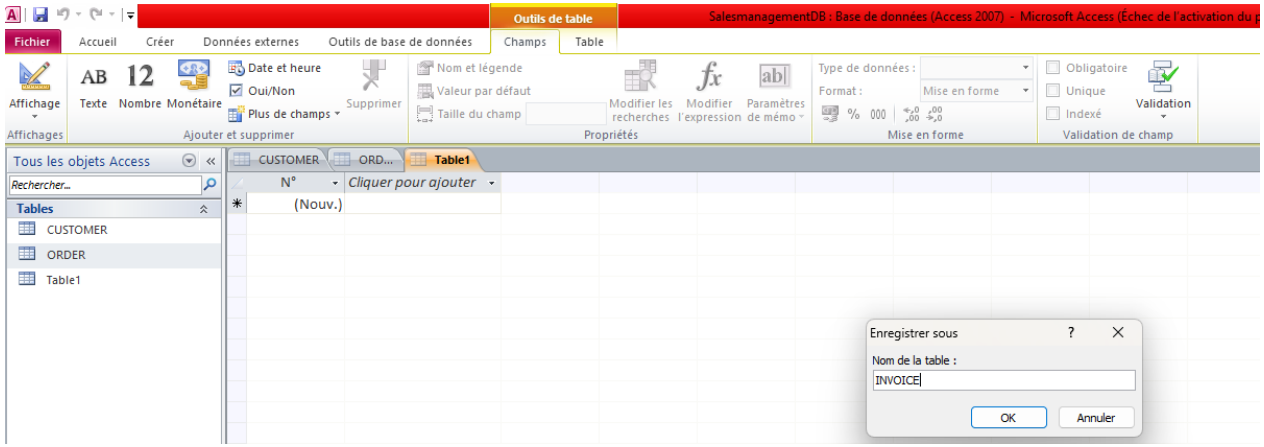
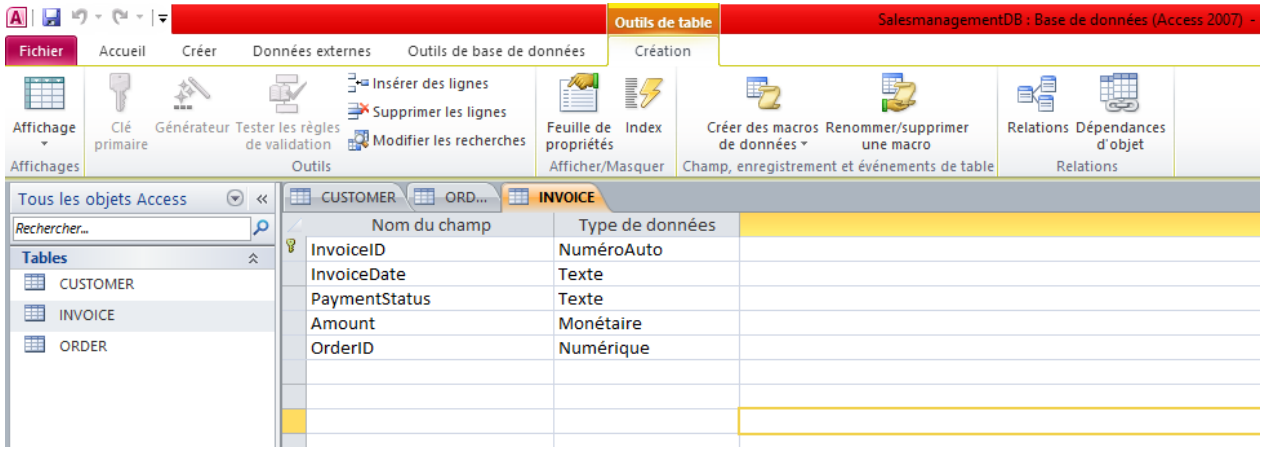
Créer des macros de données
Renommer/supprimer une macro
Champ, enregistrement et événements de table
Relations
Dépendances d'objet
Relations
Tous les objets Access
Rechercher...
Tables
CUSTOMER
ORDER
CUSTOMER
ORDER
Nom du champ
Type de données
OrderID
NuméroAuto
OrderDate
Date/Heure
TotalAmount
Texte
CustomerID
Numérique



3. Invoice (Facture) Table Purpose: Stores billing information for each order. Fields: InvoiceID (Primary Key) -InvoiceDate- OrderID (Foreign Key linked to Order table) -PaymentStatus- Amount



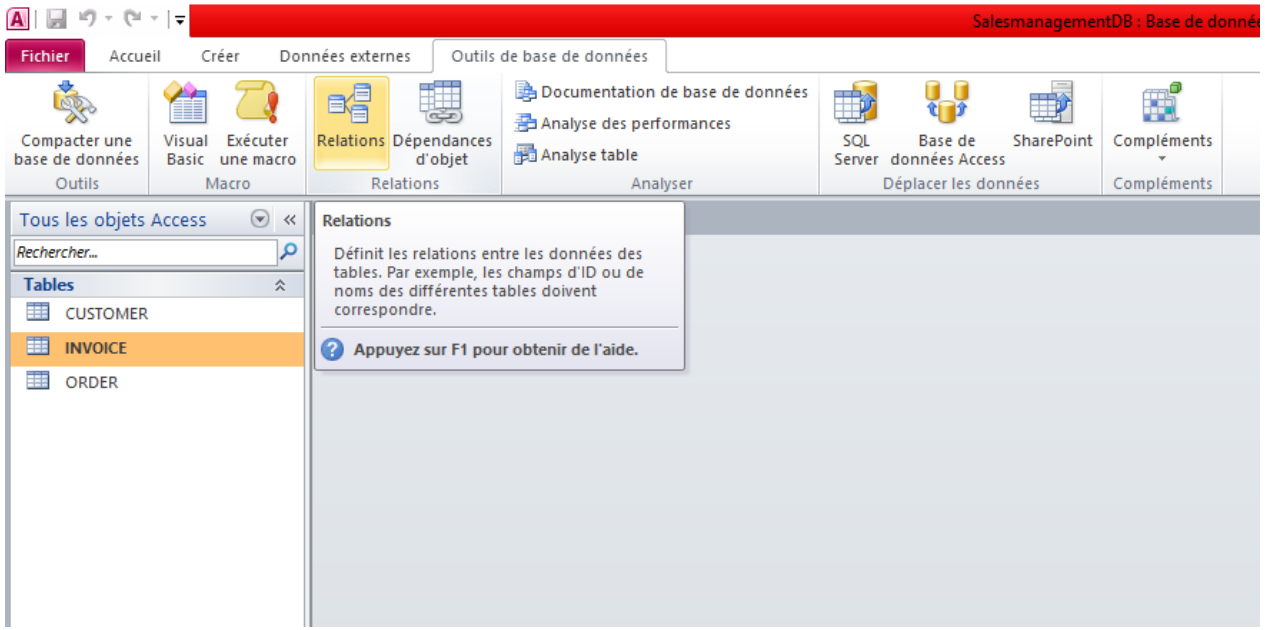
3. Relationships

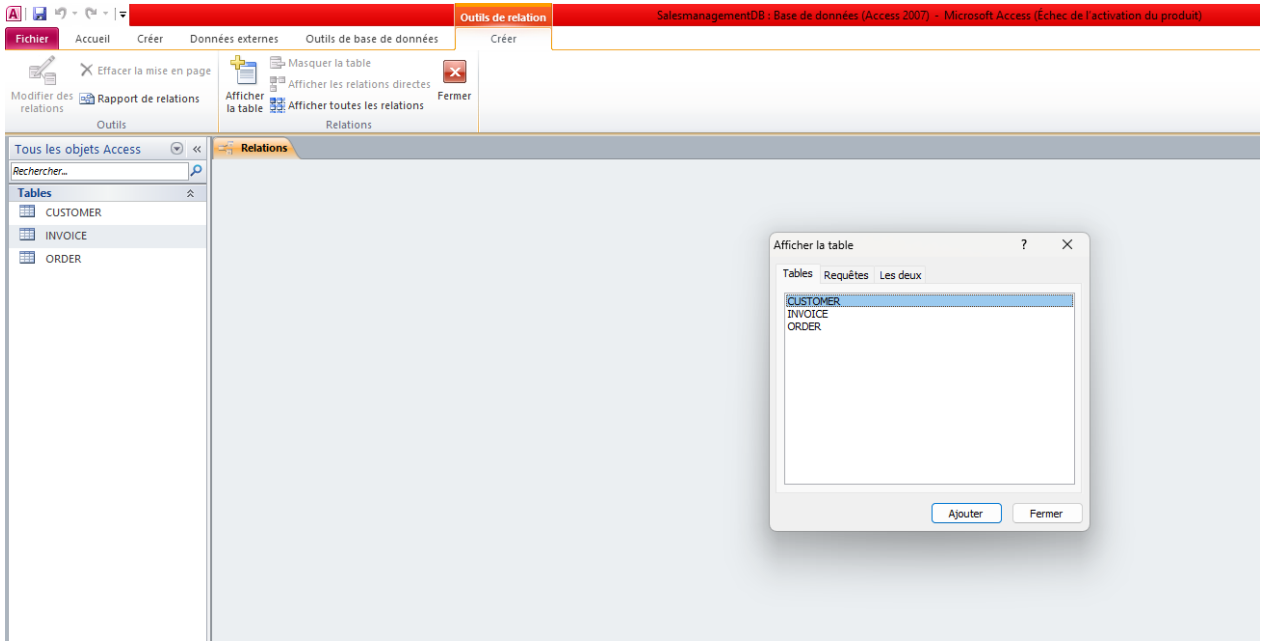
- Customer→ Order: One Customer can make multiple orders (One-to-Many relationship).
- Order → Invoice: Each order can generate one or more invoices depending on payment conditions.

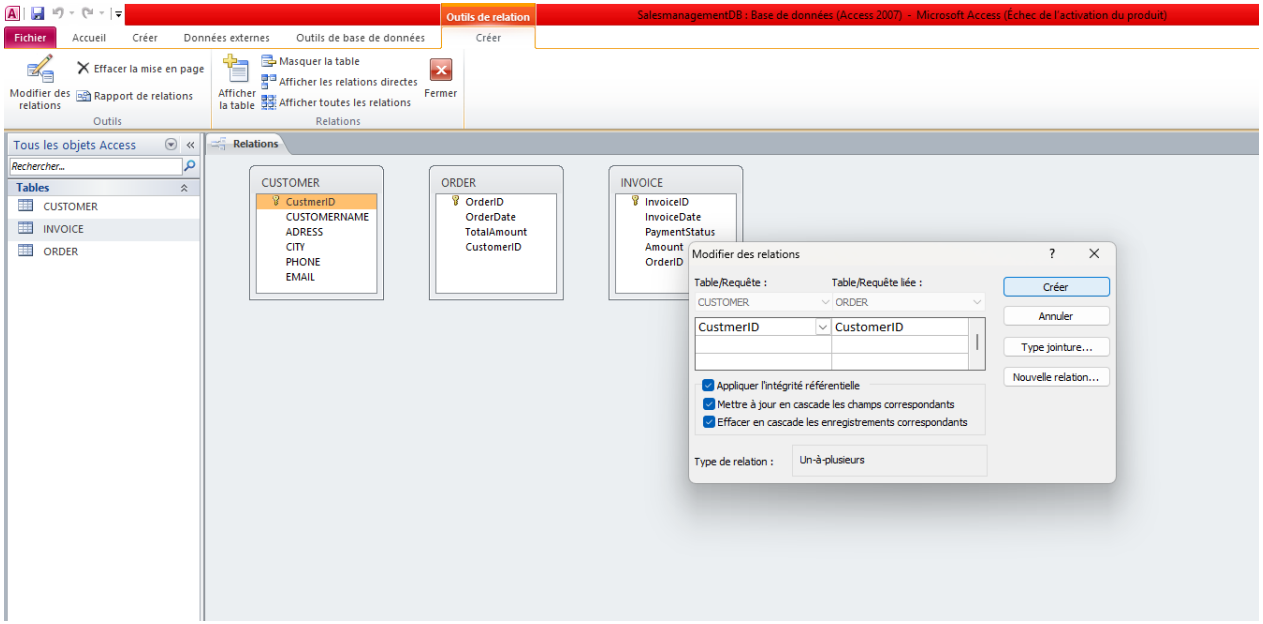
- Referential integrity should be enforced to maintain data consistency.

Relationships

- Create Relationships Between Tables Relationships link the tables together using common fields. Steps: Go to the Database Tools tab → click Relationships. Add your three tables: Customer, Order and Invoice.
- Drag CustomerID from Customer Table. to CustomerID in Order Table.. → Choose Enforce Referential Integrity → Click Create. Then drag OrderID from Order Table to OrderID in Invoice Table.. → Click Create again. Save your relationships. Now your database is ready — all tables are connected properly


SalesmanagementDB : Base de donné
Fichier
Accueil
Créer
Données externes
Outils de base de données
Compacter une base de données
Outils
Visual Basic
Exécuter une macro
Macro
Relations
Dépendances d'objet
Relations
Documentation de base de données
Analyse des performances
Analyse table
Analyser
SQL Server
Base de données Access
SharePoint
Déplacer les données
Compléments
Compléments
Tous les objets Access
Rechercher...
Tables
CUSTOMER
INVOICE
ORDER
Relations
Définit les relations entre les données des tables. Par exemple, les champs d'ID ou de noms des différentes tables doivent correspondre.
Appuyez sur F1 pour obtenir de l'aide.


Outils de relation
SalesmanagementDB : Base de données (Access 2007) - Microsoft Access (Échec de l'activation du produit)
Fichier
Accueil
Créer
Données externes
Outils de base de données
Créer
Modifier des relations
Effacer la mise en page
Rapport de relations
Outils
Afficher la table
Masquer la table
Afficher les relations directes
Afficher toutes les relations
Fermer
Relations
Tous les objets Access
Rechercher...
Tables
CUSTOMER
INVOICE
ORDER
Relations
Afficher la table
Tables
Requêtes
Les deux
CUSTOMER
INVOICE
ORDER
Ajouter
Fermer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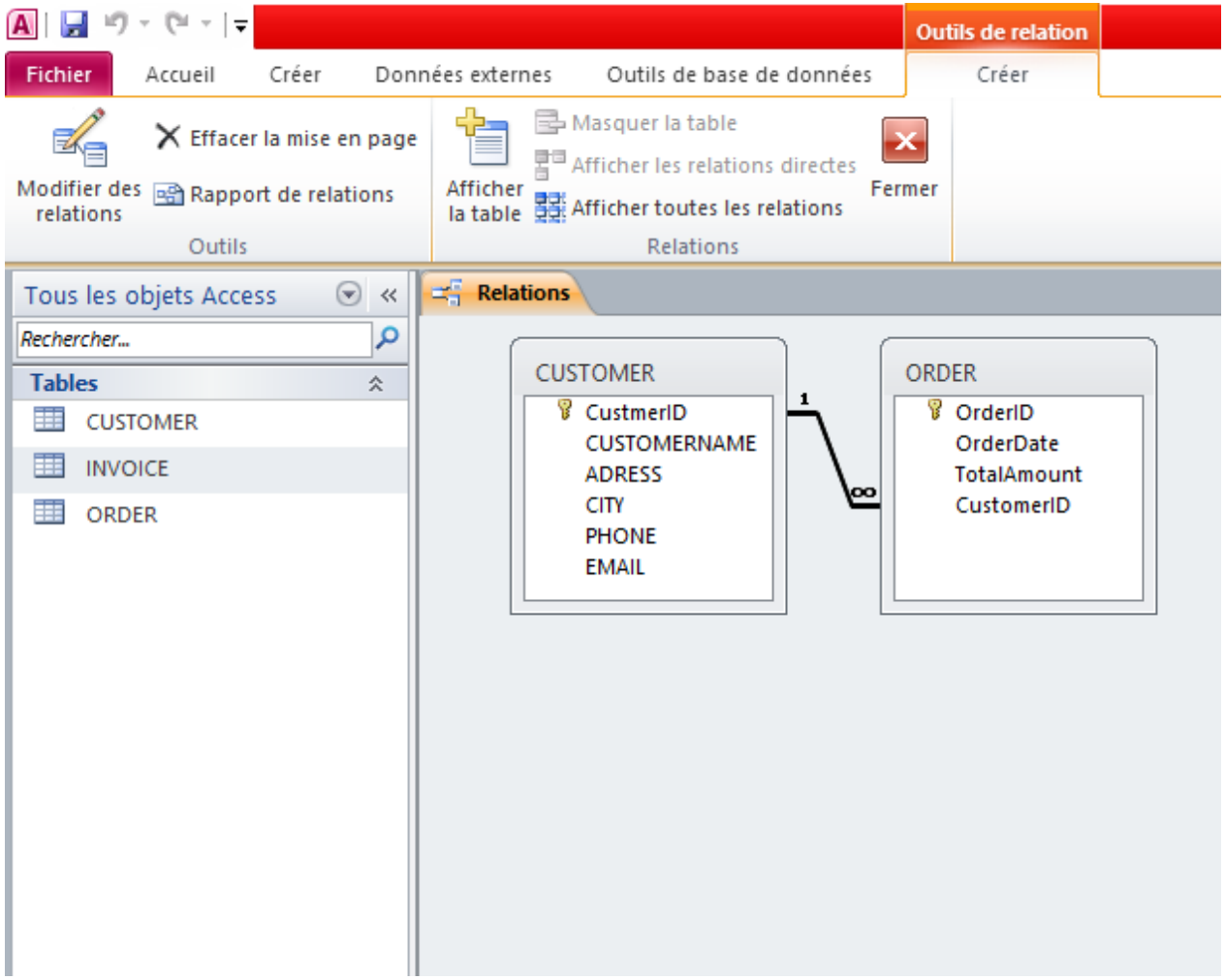
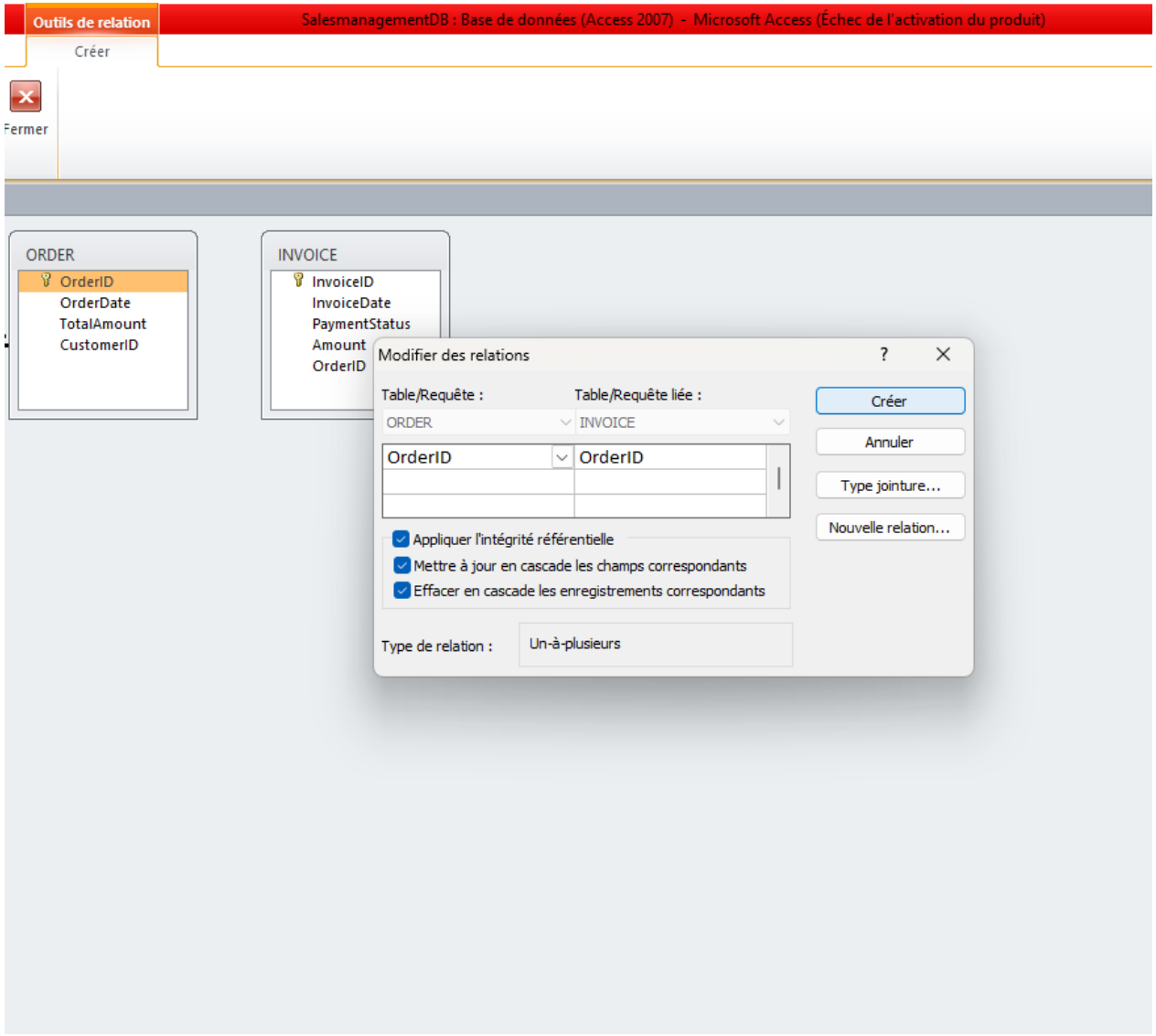
Relations
Fermer
Tous les objets Access
Rechercher...
Tables
CUSTOMER
INVOICE
ORDER
Relations
CUSTOMER
CustmerID
CUSTOMERNAME
ADRESS
CITY
PHONE
EMAIL
ORDER
OrderID
OrderDate
TotalAmount
CustomerID
INVOICE
InvoiceID
InvoiceDate
PaymentStatus
Amount
OrderID
Modifier des relations
Table/Requête :
Table/Requête liée :
CUSTOMER
ORDER
CustmerID
CustomerID
Appliquer l'intégrité référentielle
Mettre à jour en cascade les champs correspondants
Effacer en cascade les enregistrements correspondants
Type de relation :
Un-à-plusieurs
Créer
Annuler
Type jointure...
Nouvelle relation...



- Customer → Order: One customer can make multiple orders (One-to-Many relationship).


Outils de relation
SalesmanagementDB : Base de données (Access 2007) - Microsoft Access (Échec de l'activation du produit)
Créer
Fermer
ORDER
OrderID
OrderDate
TotalAmount
CustomerID
INVOICE
InvoiceID
InvoiceDate
PaymentStatus
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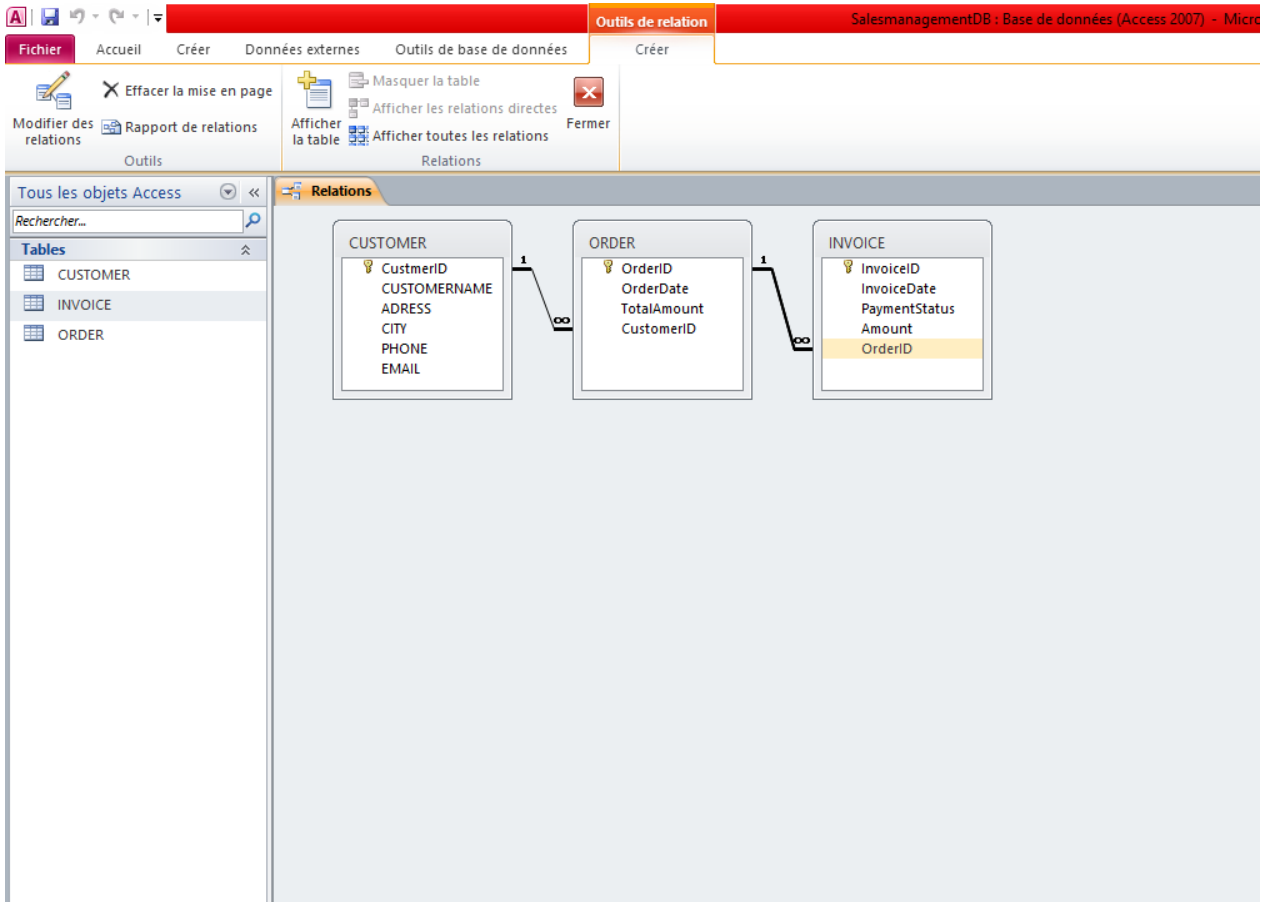

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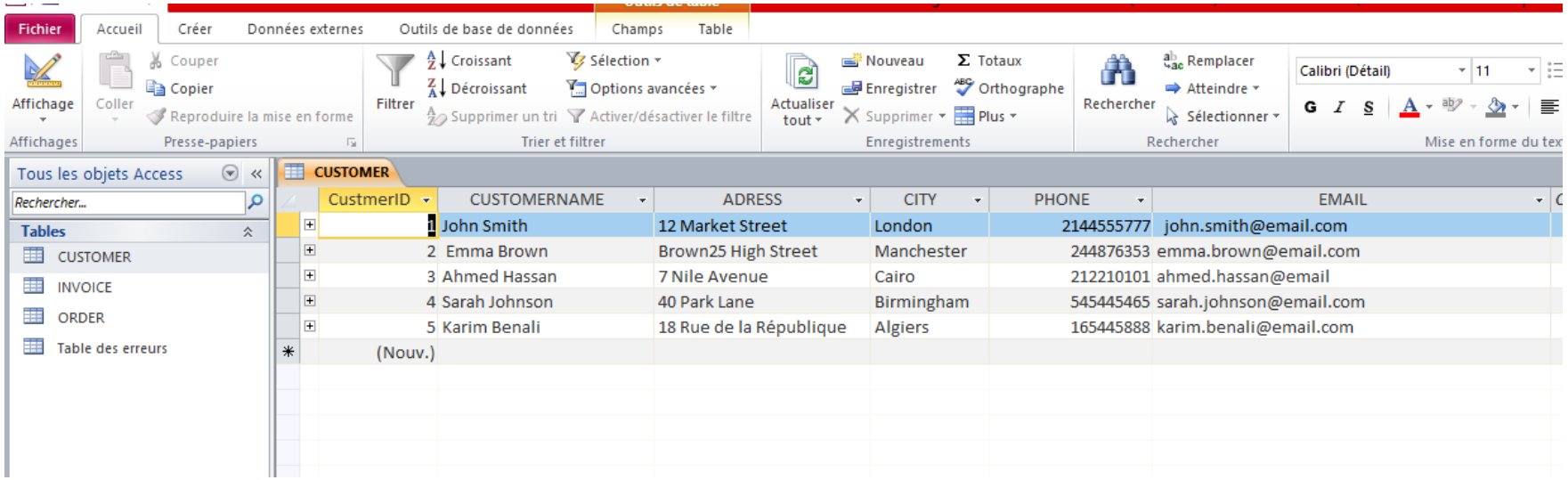
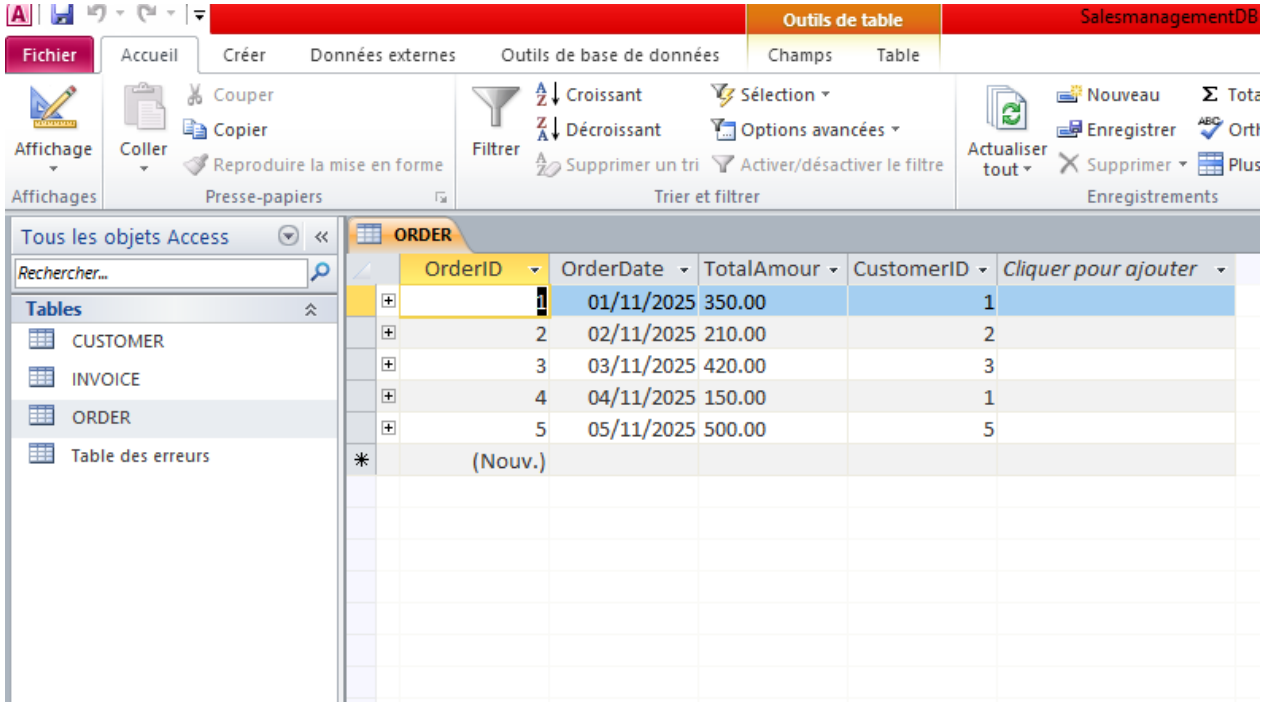
Customer Table Data



CustmerID	CUSTOMERNAME	ADRESS	CITY	PHONE	EMAIL
1	John Smith	12 Market Street	London	2144555777	john.smith@email.com
2	Emma Brown	Brown25 High Street	Manchester	244876353	emma.brown@email.com
3	Ahmed Hassan	7 Nile Avenue	Cairo	212210101	ahmed.hassan@email
4	Sarah Johnson	40 Park Lane	Birmingham	545445465	sarah.johnson@email.com
5	Karim Benali	18 Rue de la République	Algiers	165445888	karim.benali@email.com
(Nouv.)					

OrderTable Data



. Invoice Table Data