<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CreateOrganization</td>
<td>Creates a new Organizations record in the database.</td>
</tr>
<tr>
<td>CreateContact</td>
<td>Creates a new Contacts record in the database with an associated Organization.</td>
</tr>
<tr>
<td>CreateProduct</td>
<td>Creates a new Products record in the database with an associated Organization.</td>
</tr>
<tr>
<td>CreateCustomer</td>
<td>Creates a new Customers record in the database.</td>
</tr>
<tr>
<td>CreateSale</td>
<td>Creates a new Sales record in the database with an associated Customer and Product.</td>
</tr>
<tr>
<td>CreateProductCategory</td>
<td>Creates a new ProductsCategories record in the database.</td>
</tr>
<tr>
<td>CreateProductCause</td>
<td>Creates a new ProductsCauses record in the database.</td>
</tr>
<tr>
<td>ListOrganizations</td>
<td>Retrieves all Organizations in the database.</td>
</tr>
<tr>
<td>ListProducts</td>
<td>Retrieves all Products associated with a given Organization.</td>
</tr>
<tr>
<td>ListContacts</td>
<td>Retrieves all Contacts associated with a given Organization.</td>
</tr>
<tr>
<td>ListSales</td>
<td>Retrieves all Sales associated with a given Organization.</td>
</tr>
<tr>
<td>ListCustomers</td>
<td>Retrieves all Customers associated with a given Organization or Product.</td>
</tr>
<tr>
<td>SearchProducts</td>
<td>Searches all Products records in the database with a given search criteria.</td>
</tr>
<tr>
<td>AuthenticateUser</td>
<td>Authenticates a given Users login credentials.</td>
</tr>
<tr>
<td>GenerateSalesReport</td>
<td>Generates a sales report for a given Organization or Product and date range.</td>
</tr>
</tbody>
</table>

**Function:** CreateOrganization  
**Parameters:**  
- **Name**  
  The name of the Organization to be created.  
- **Address**  
  The address of the Organization.  
- **Website**  
  The website url for the Organization.  
**Output:**  
A new database record in Organizations table.

**Function:** CreateContact  
**Parameters:**  
- **Name**  
  The name of the Contact to be created.  
- **Email**  
  The email address of the Contact.  
- **Password**  
  The password used for login authentication.  
**Output:**  
A new database record in Contacts table.

**Function:** CreateProduct  
**Parameters:**  
- **Name**  
  The name of the Product to be created.  
- **Description**  
  A brief description of the Product.  
- **Category**  
  The Product category to place the Product in.  
- **Cause**  
  The Product cause to place the product in.  
- **Price**  
  The price of the Product.  
**Output:**  
A new database record in Products table.
Function: **CreateCustomer**
Parameters:
- **Name** The name of the Customer to be created.
- **Address** The address of the Customer.
- **Phone** The phone number of the Customer.
- **Email** The email address of the Customer.
- **Password** The password used for login authentication.

Output: A new database record in Customers table.

Function: **CreateSale**
Parameters:
- **Date** The date of the Sale.
- **Product** The Product being purchased.
- **Customer** The Customer purchasing the Product.
- **Quantity** The quantity of the Product being purchased.
- **TotalPrice** The total price of the Sale.


Function: **CreateProductCategory**
Parameters:
- **Name** The name of the Category to be created.
- **Description** A description of the Category.


Function: **CreateProductCause**
Parameters:
- **Name** The name of the Cause to be created.
- **Description** A description of the Cause.

Output: A new database record in Causes table.

Function: **ListOrganizations**
Parameters: None
Output: A list of Organizations existing in the database.

Function: **ListProducts**
Parameters:
- **Organization** A specific Organization to search by.
- **Category** A specific Product Category to search by.
- **Cause** A specific Product Cause to search by.

Output: A list of Products matching the given search criteria.

Function: **ListContacts**
Parameters: A specific Organization to search by.
Output: A list of Contacts belonging to specified Organization.

Function: **ListSales**
Parameters:
- **Organization** A specific Organization to search by.
- **Product** A specific Product to search by.
- **Customer** A specific Customer to search by.

Output: A list of Sales matching the given search criteria.
### Function: ListCustomers

**Parameters:**
- Organization: A specific Organization to search by.
- Product: A specific Product to search by.

**Output:** A list of Customers matching the given search criteria.

### Function: SearchProducts

**Parameters:**
- Organization: A specific Organization to search by.
- Keywords: A specific set of keywords to search by.

**Output:** A list of Products matching the given search criteria.

### Function: AuthenticateUser

**Parameters:**
- Email: A user’s email address.
- Password: A user’s password.

**Output:** True if success; else False.

### Function: GenerateSalesReport

**Parameters:**
- Organization: A specific Organization to generate report from.
- Product: A set of Product(s) to generate report from.
- DateRange: A specific date range to generate from.

**Output:** Sales records pertaining to given parameters.