Experiment No: 10

Title: Create a report using Salesforce.

Aim: To understand How to create a report in salesforce.

Theory:

Reports in Salesforce:

Reports in Salesforce are a list of records that meet particular criteria which give an answer to a particular question. These records are displayed as a table that can be filtered or grouped based on any field.

Report types:

Report type determines which set of records will be available in a report. Every report type has a primary object and one or more related objects. All these objects must be linked together either directly or indirectly. A report type cannot include more than 4 objects. Once a report is created its report type cannot be changed.

There are 2 kinds of report types in salesforce:

1. Standard Report Types:

Standard Report Types are automatically included with standard objects and also with custom objects where "Allow Reports" is checked. Standard report types cannot be customized and automatically include standard and custom fields for each object within the report type. Standard report types get created when an object is created, and also when a relationship is created. Standard report types always have inner joins.

2. Custom Report Types:

Custom report types are reporting templates created to streamline the reporting process. Custom Reports are created by an administrator or User with "Manage Custom Report Types" permission. Custom report types are created when standard report types cannot specify which records will be available on reports. In custom report types we can specify objects which will be available in a particular report. The primary object must have a relationship with other objects present in a report type either directly or indirectly.

Object relationships that are supported by Custom Report Types can:

1. Include all records that have children.
2. Include all records that may or may not have children.

After selecting the report type we switch to the report builder to create a report. The report builder is a visual editor for reports. It lets administrators or users create reports in a very easy way. It contains 3 main components:

1. Fields Pane:

Fields Pane displays the fields that are available from a particular report type.

2. Filters Pane:

Filters Pane allows us to set additional filters that limit the records available in reports. Criteria here include view, time frame, and custom filters.

3. Preview Pane:

Preview Pane shows how the report will look like. This pane allows us to add, reorder, and remove columns, summary fields, formulas, groupings, and blocks. Also, it allows us to change the report format and display a chart based on the report.

There are 4 types of report formats in Salesforce:

1. Tabular Reports:

This is the most basic report format. It just displays the row of records in a table with a grand total. While easy to set up they can't be used to create groups of data or charts and also cannot be used in Dashboards. They are mainly used to generate a simple list or a list with a grand total.

2. Summary Reports:

It is the most commonly used type of report. It allows the grouping of rows of data, viewing subtotal, and creating charts.

3. Matrix Report:

It is the most complex report format. Matrix report summarizes information in a grid format. It allows records to be grouped by both columns and rows. It can also be used to generate dashboards. Charts can be added to this type of report.

4. Joined Reports:

These types of reports let us create different views of data from multiple report types. The data is joined reports are organized in blocks. Each block acts as a subreport with its own fields, columns, sorting, and filtering. They are used to group and show data from multiple report types in different views.

When we save a report only the parameters of the report get saved. The data is always evaluated in real-time (when a report is run). The report can be run manually as well as it can be scheduled to run automatically based on the running user. The data which is displayed in reports is based on the running user's sharing and security settings. But when we schedule a report we have to select

a running user based on whose security and sharing settings the report is generated. Every report is saved in a particular folder. Users who have access to the report folders can run the report. Each user, group, or role can have its own level of access to a folder.

There are 3 types of access levels of folders:

1. Viewer:

With this access level, users can see the data in a report but cannot make any changes except cloning it into a new report.
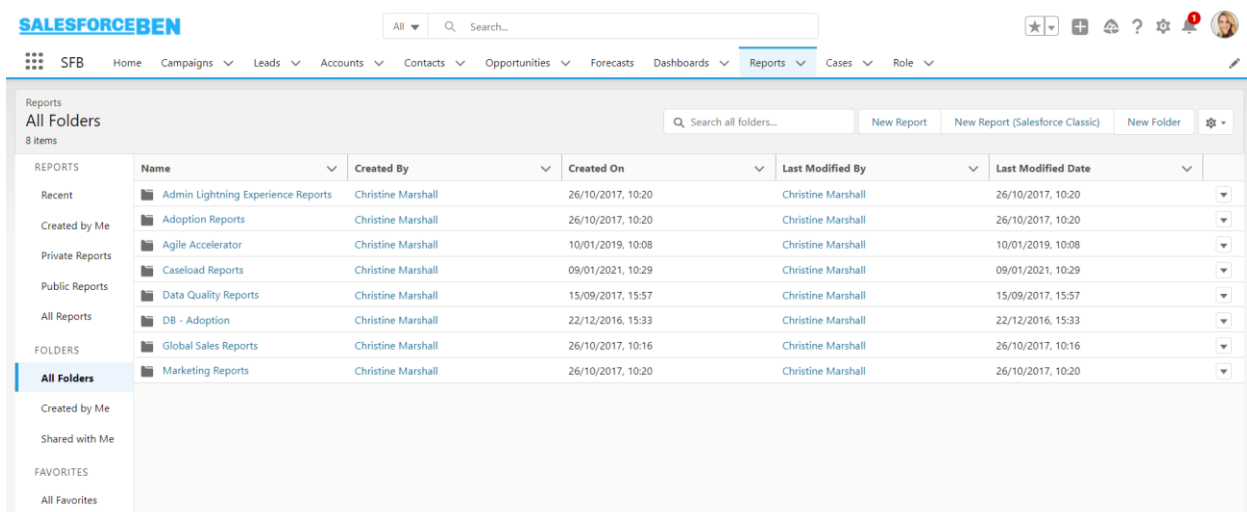
2. Editor:

With this access level, users can view and modify the reports it contains and can also move them to/from any other folders they have access level as Editor or Manager.

3. Manager:

With this access level, users can do everything Viewers & Editors can do, plus they can also control other user's access levels to this folder. Also, users with Manager Access levels can delete the report.

If a folder does not have Manager Access then it is public and users with "View Reports in Public folders" can view it. Depending on their object access these users can run the report. Reports present in public folders can be emailed to Salesforce users. If a user is not ready to share his/her report then he/she should save it in the "My Personal Custom Reports" folder. Reports can be exported in .xlsx format or.csv format The report displays up to 2000 rows of data. Larger reports can be emailed to Excel.
A user cannot create a report on an object he/she does not have access to.

Conclusion: Thus, We have created reports in salesforce.