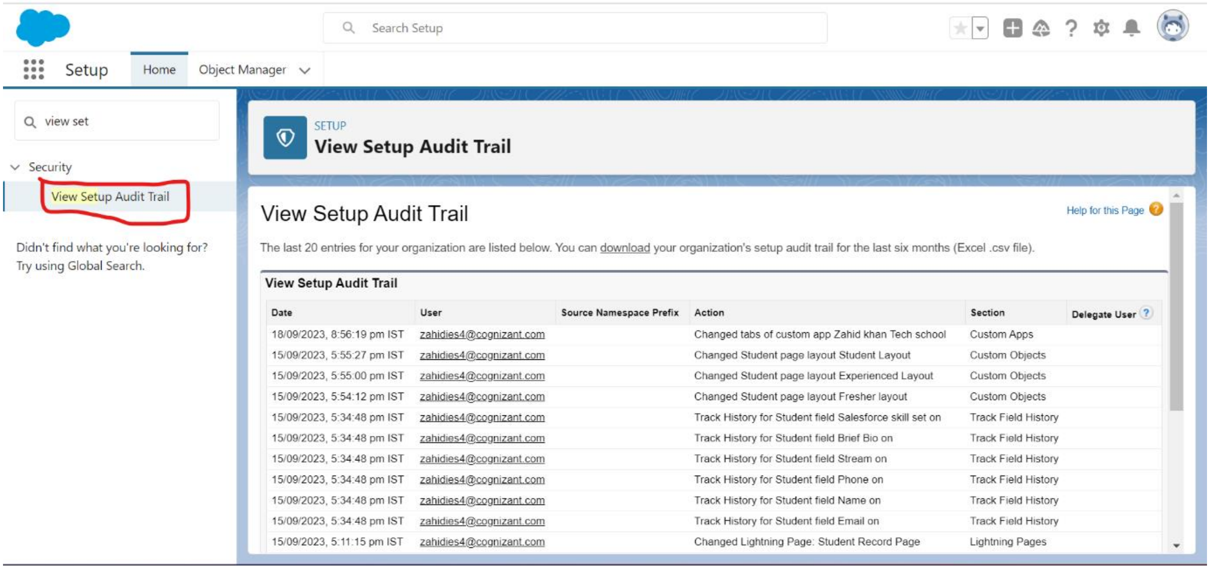
View Steup Audit Trials

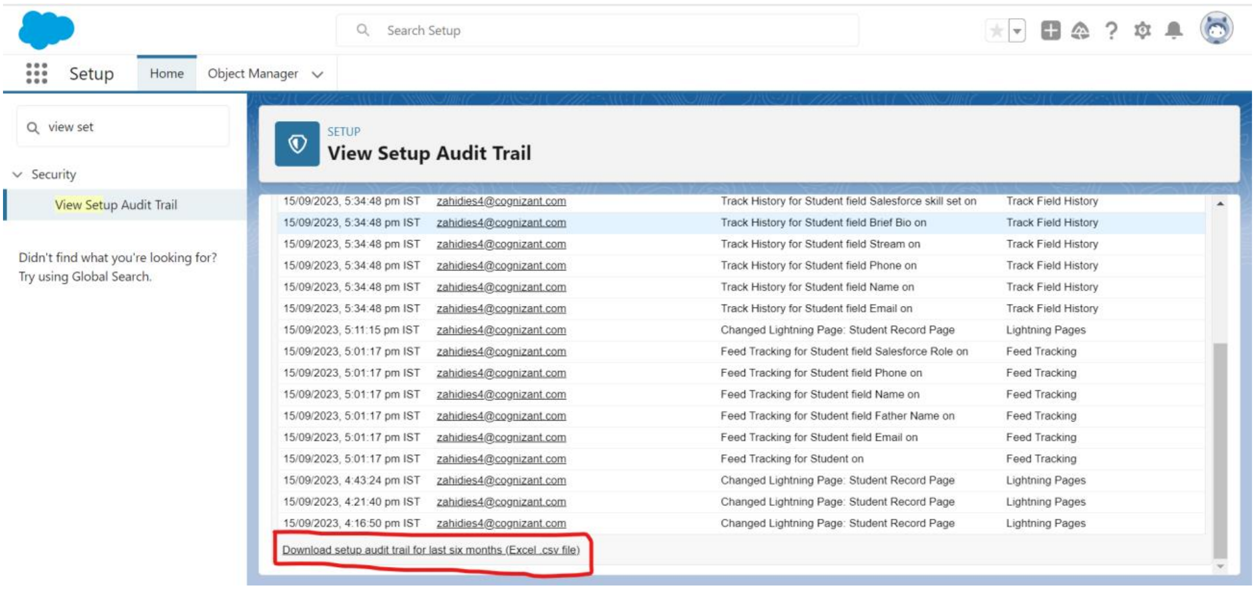
- Setup audit trail shows a list of changes done by users in the org in different components.
- One can download past 6 months changes.

Steps to show the Setup audit trails:

- Go to set up click on home and in quick search type view setup audit trails.
- After that click on it you will see all the records who changes which filed with date and time.



- we can also download records of 6 months in excel file.



Day-08

Reports on standard object

What is Report?

- Report is a list of records related to objects that meet the criteria defined.
- One can filter, group, and do math's on reports.
- One can display reports graphically through chart.
- Every report is stored in a folder.
- Report folders determines how one can access reports to view, edit, or manager.
- Report folders can be public, hidden, or shared.

Report builder:

- Here you can create a report.
- You need to select a record type.
- Select fields to display in report.
- Apply filters.
- Group report based on rows and columns.
- Run reports.
- Save reports.

Filters:

There are 4 types of filters.

- Standard filter
  Show me & created date.
- Field filter
  Specific to field.
- Filter logic
  Boolean condition to control filed filters.
- Cross filter
  Filter a report by child object using with or without condition.

Report Format:

- Tabular
  Make a list (same as list view).
- Summary
  Group & summarize.
- Matrix

Group & summarize by Row and column.

- Joined

  Report on multiple report types.

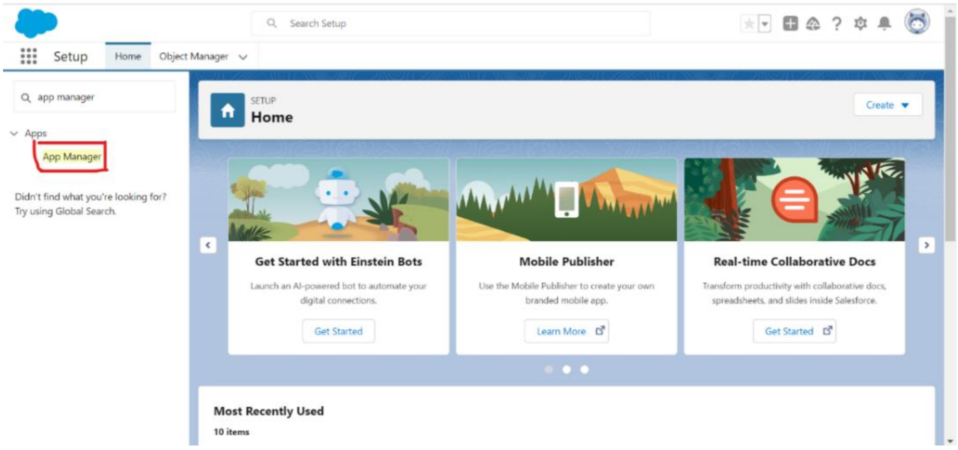
Report folders:

As every report is stored in a folder, so:

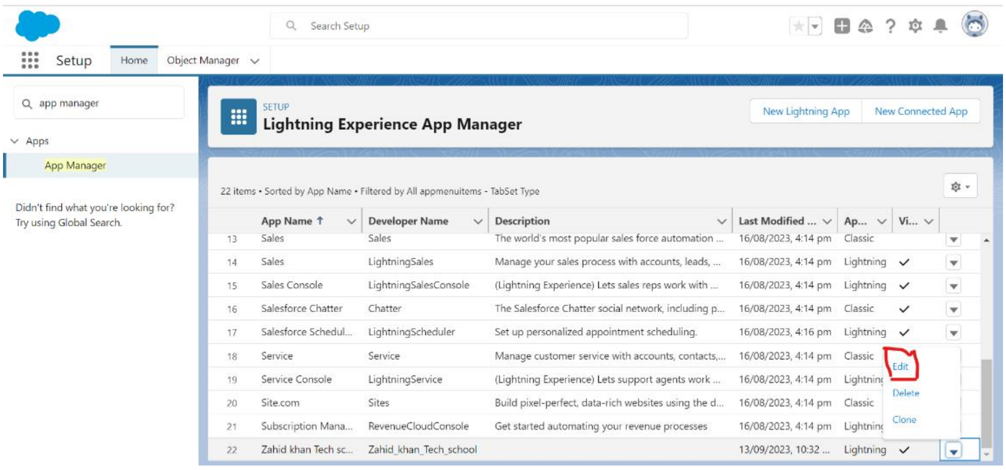
- Report folder determines how one can access reports to view, edit, or manage.
- Report folders can be public, hidden, or shared.
- We can control access of contents of the folder based on roles, permissions, public groups, territories, and license types.

<u>Steps to create Tabular report using standard object:</u>

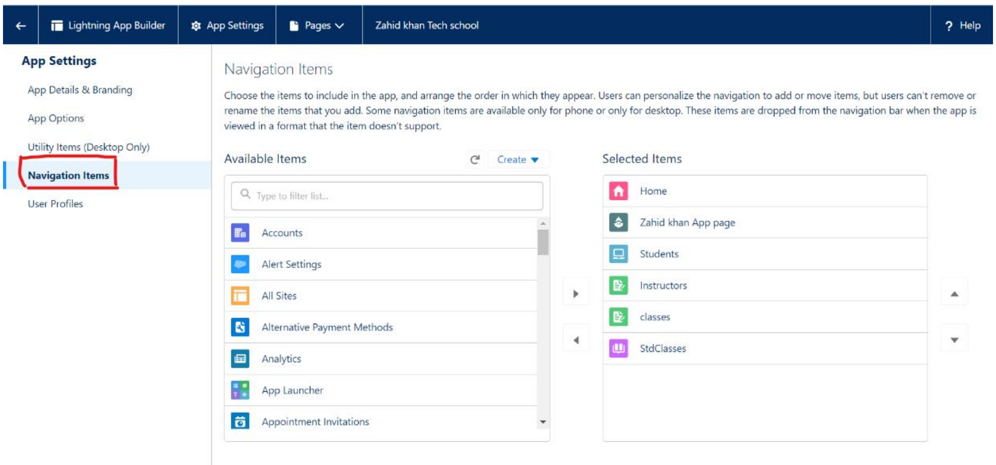
- To make report in our App using standard object. We have to add **Report** and **Dashboard** tab in our app.
- To add Report and Dashboard click on setup after that click on **Quick Find** and type App manager.



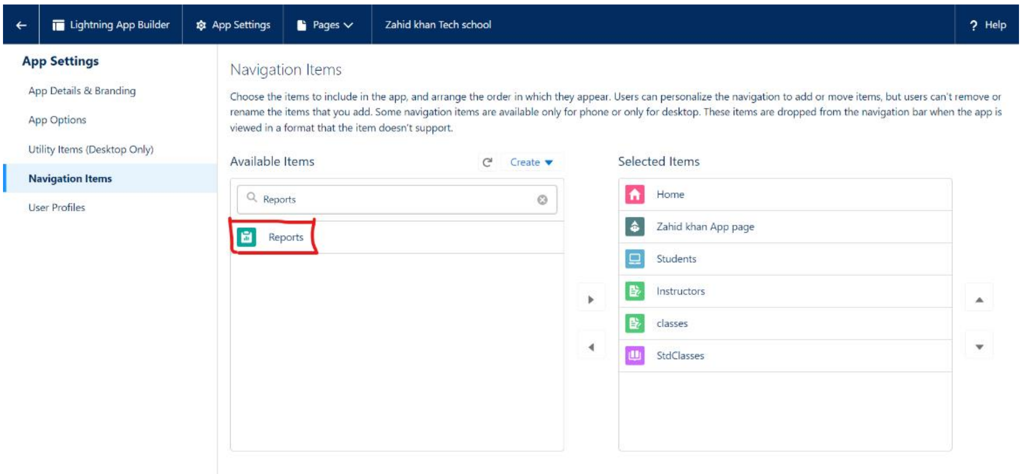
- After that click on App manager and go to our App **Zahid khan Tech school** and click on edit.



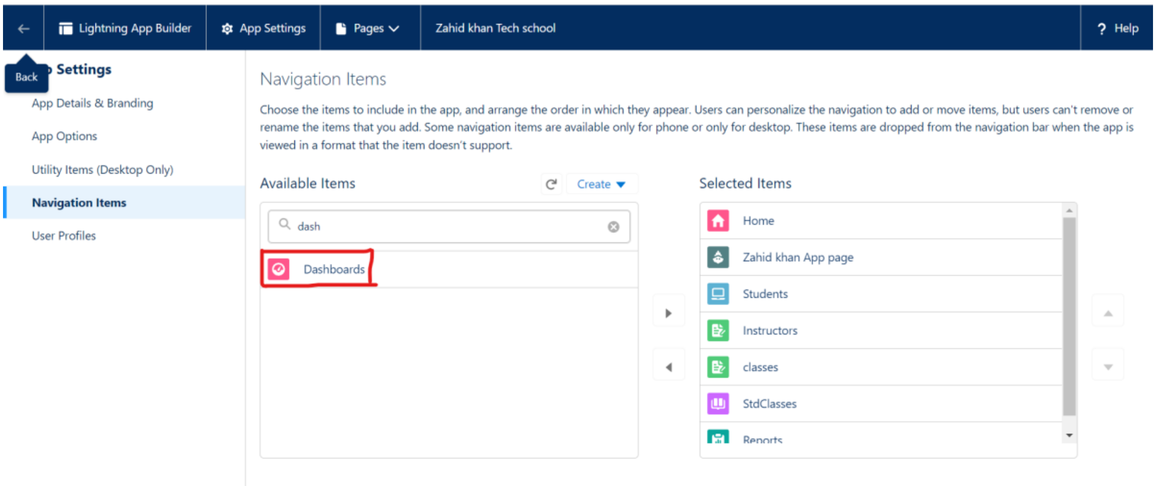
- After that click on navigation item.



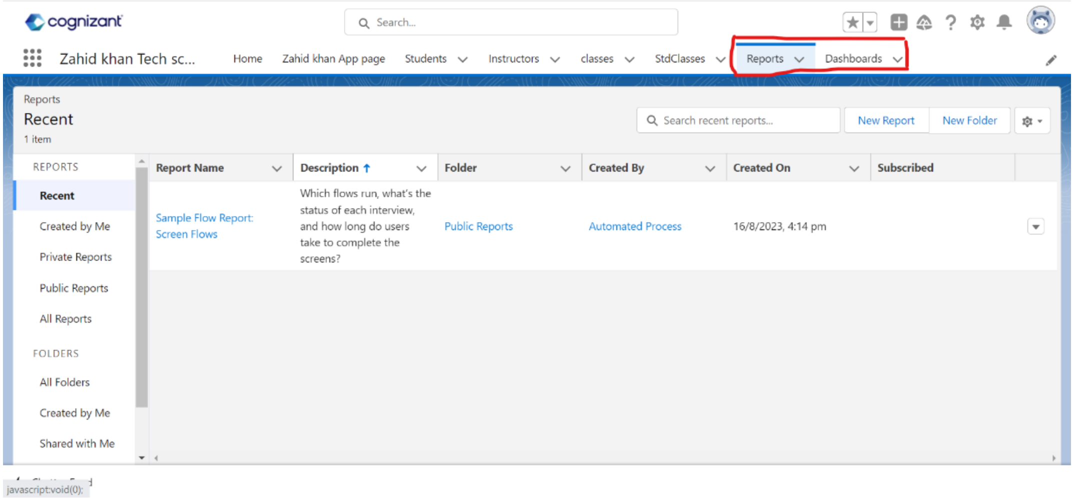
- 1st search **Report** in Available items and insert **Report** in selected Items.



- Now search for Dashboard in available items and insert in selected items.



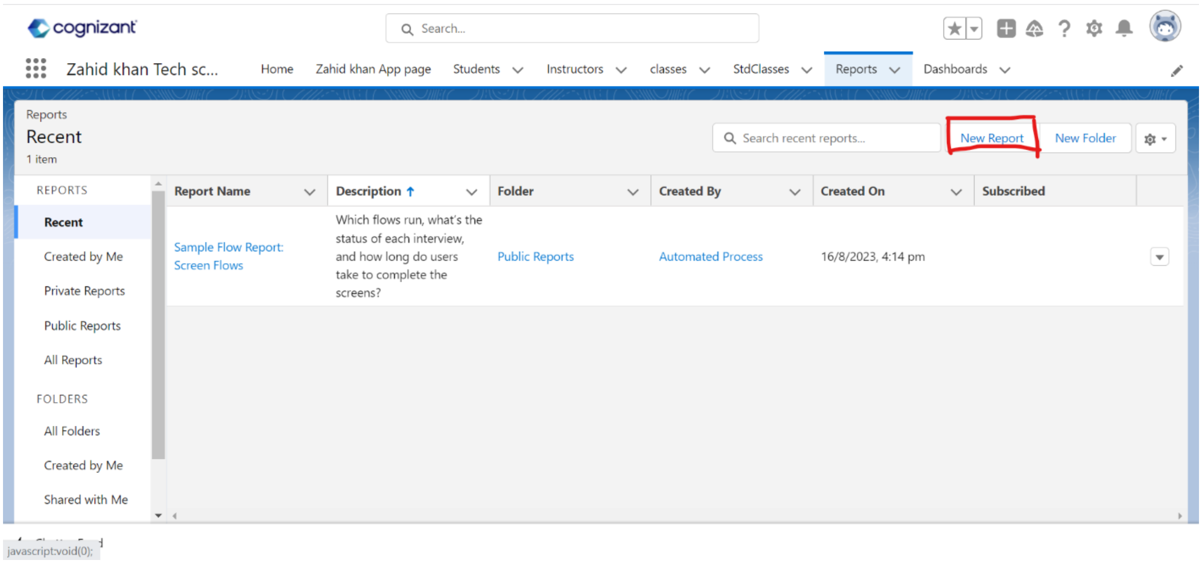
- Now click on save. Now go to App and check.



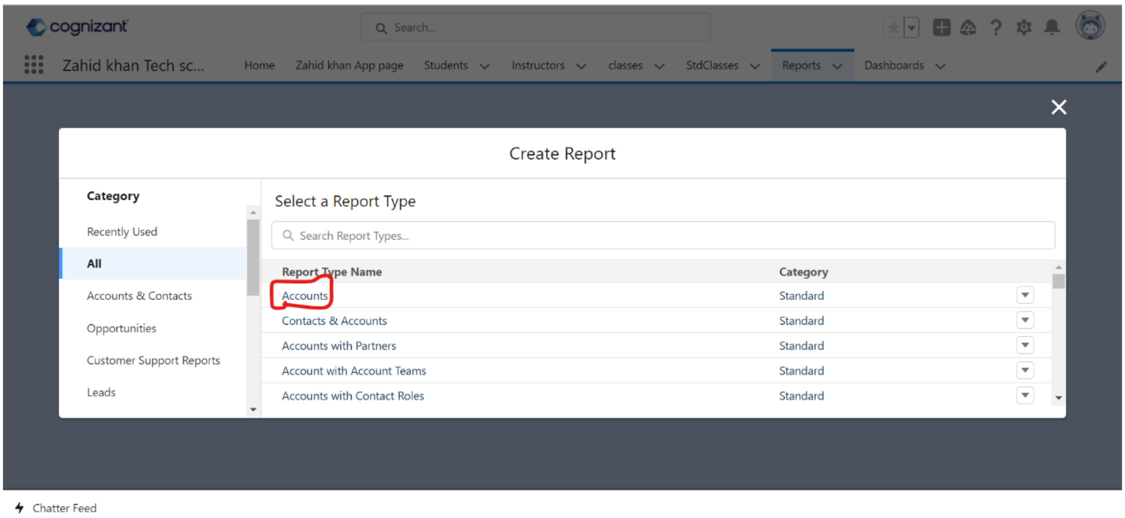
Tabular Report

Steps to creating tabular report:

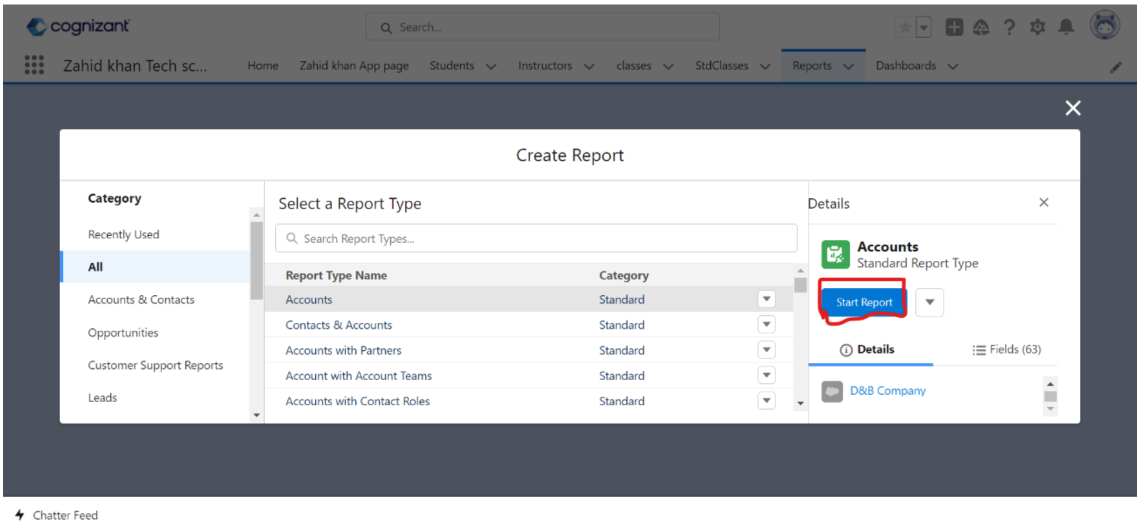
- For creating Tabular report of standard object. We have to click **on New Report**.



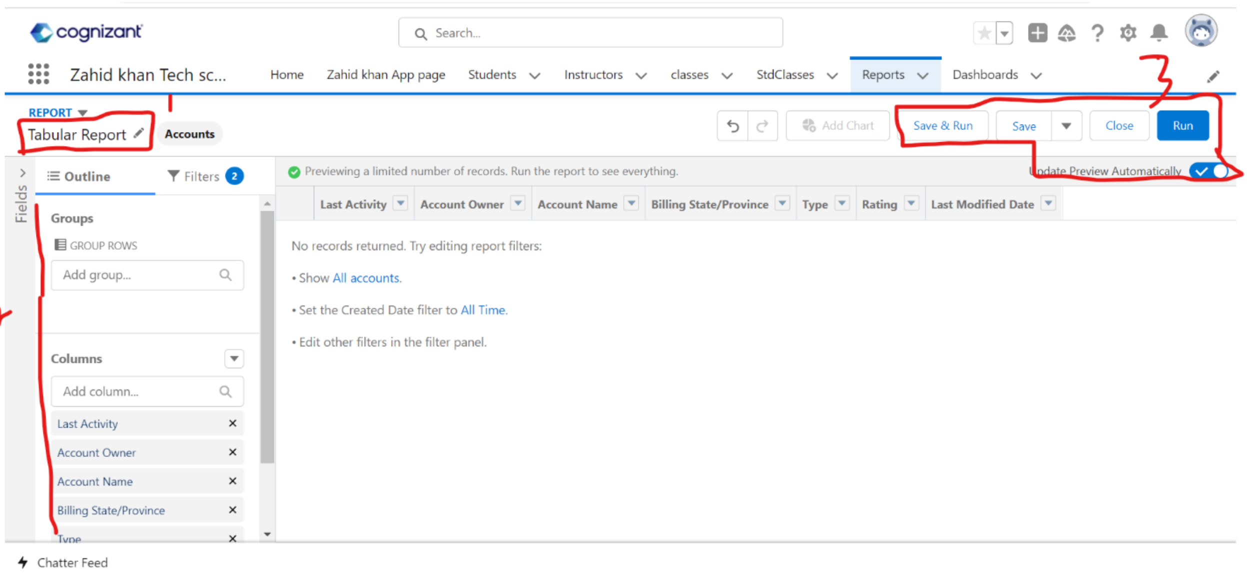
- After that select record type. Here we are creating report of Account. So, select **Account**.



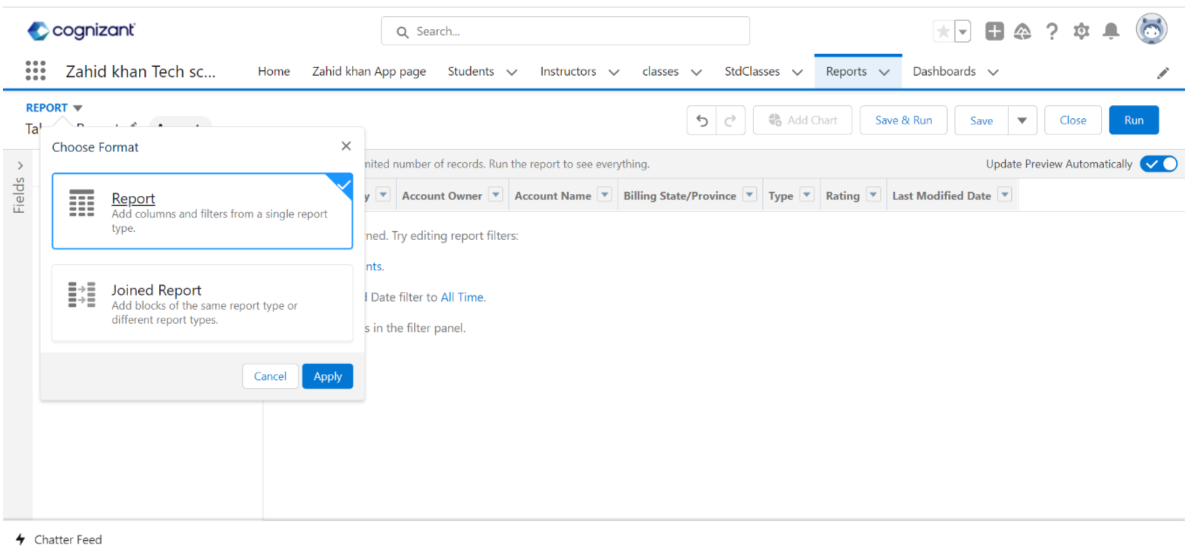
- After that click on **Start Report**.



- Pencil button is used to rename the reports.
- On left side on side bar, we have 2 options outline and Filter. In outline Groups is used for summary Report type and column is use for tabular report. In filter we can apply all 4 filter as mentioned above.
- From **Column** we can insert any column in report by searching its name. and always on Update Preview automatically.
- Save&Run button is used to save as well as run the report. Close is used to close the report without saving and Run is used to Run the report after save.

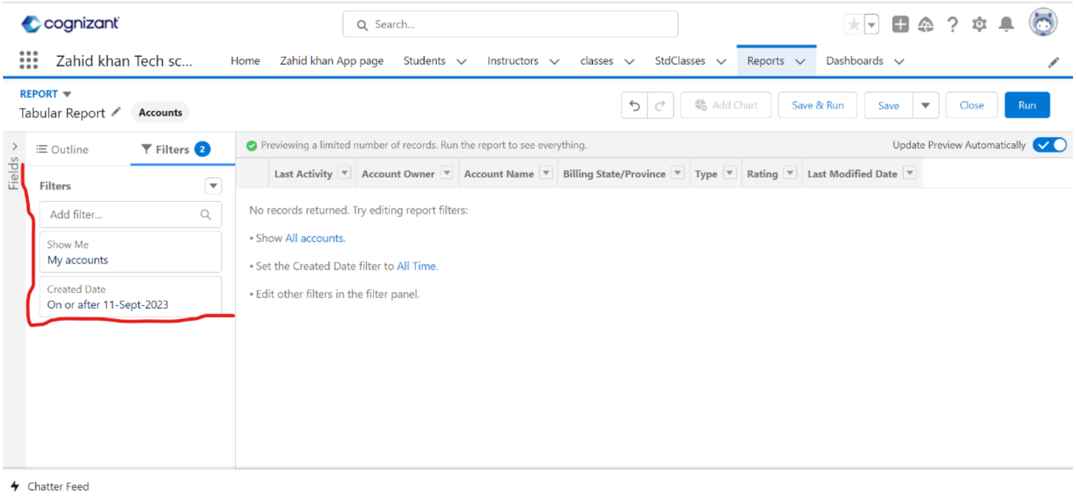


- We can see Report text at top of the page when we click on it we got 2 option Reports and joined reports. Reports option is for tabular, summary, and matrix report. And joined report options is used for joined reports.

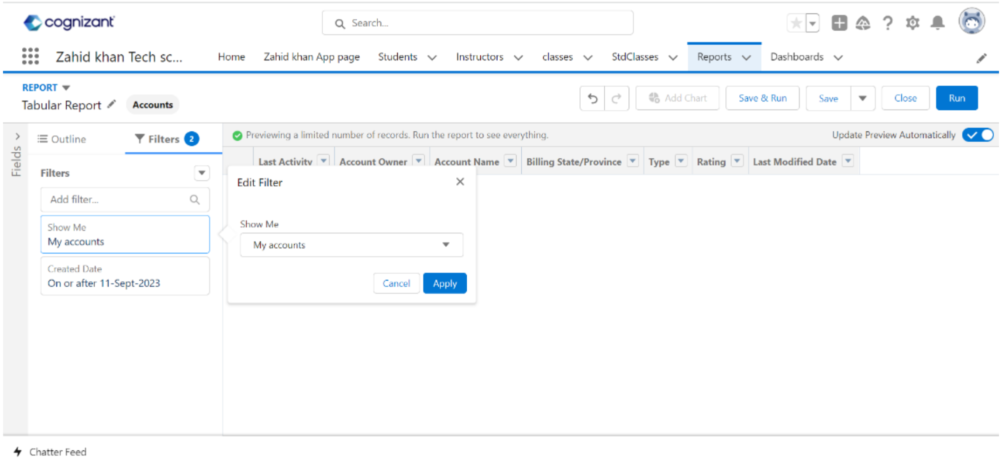


- **1st type filter-** now click on filter we got 2 options by default **show me** and **created date** this is standard filter.

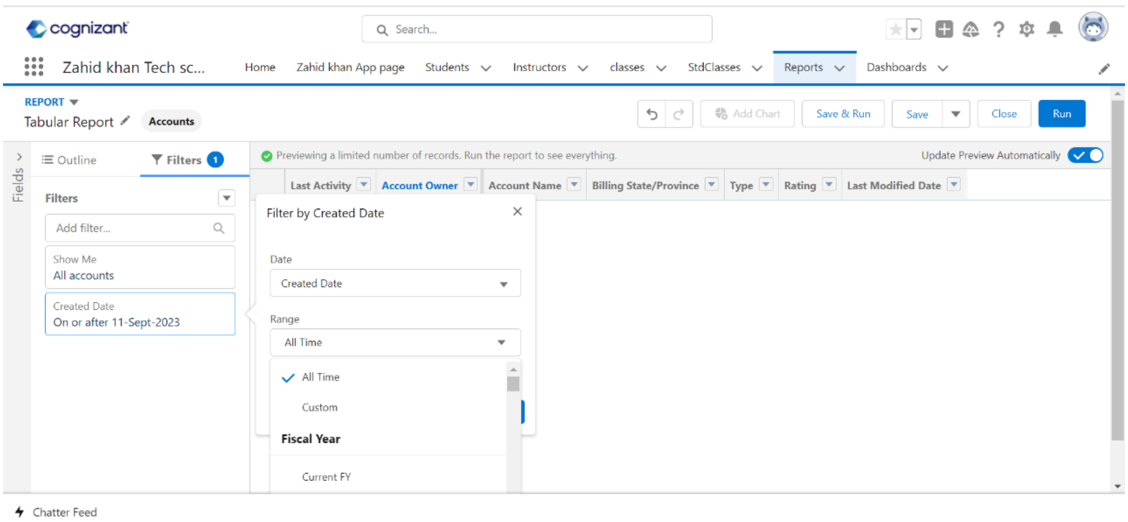
- When we click on show me, we got 4 options by default My accounts, My team's account, All accounts and filter by scope



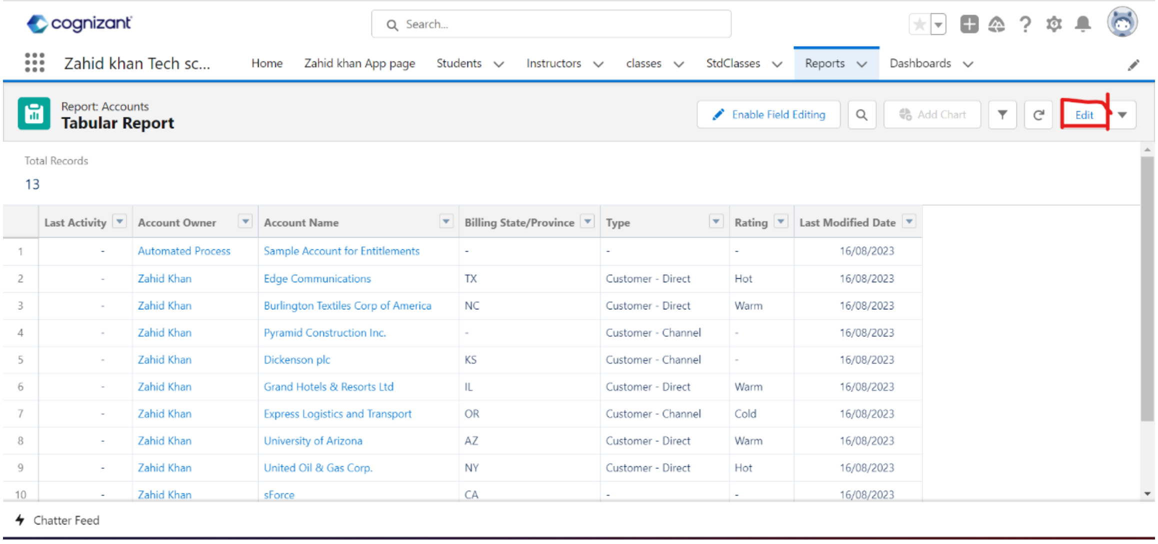
- In show me we have to select all accounts because we want to show all accounts records on report. And click on apply.



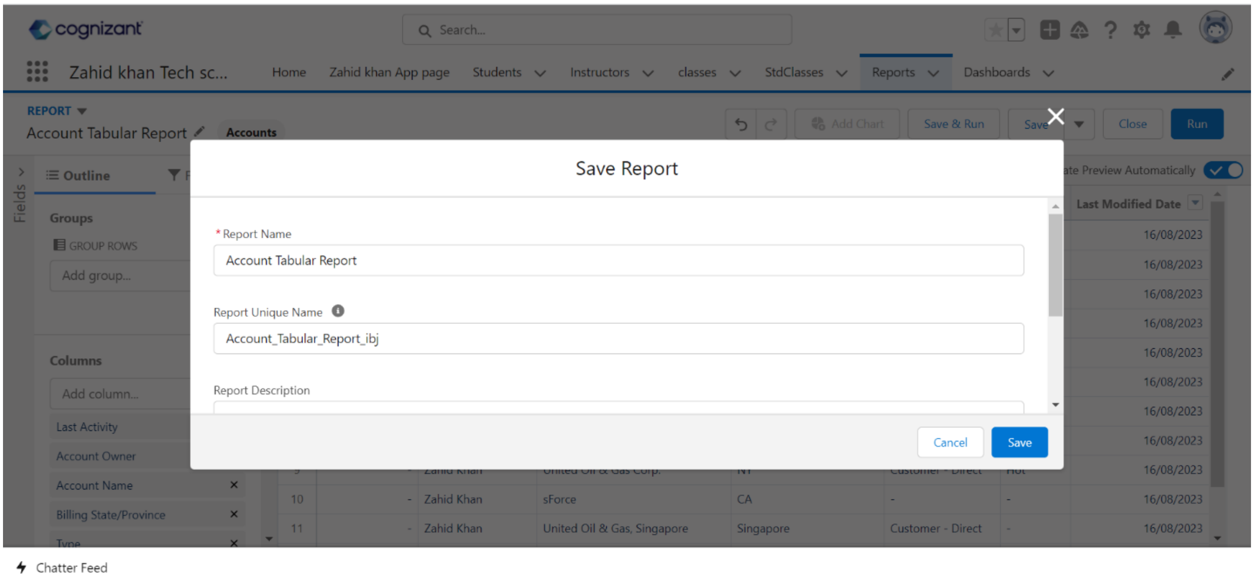
- In created on we got option to show created date based on choosing date but for now we are choosing All time from Range drop down. And click on apply.



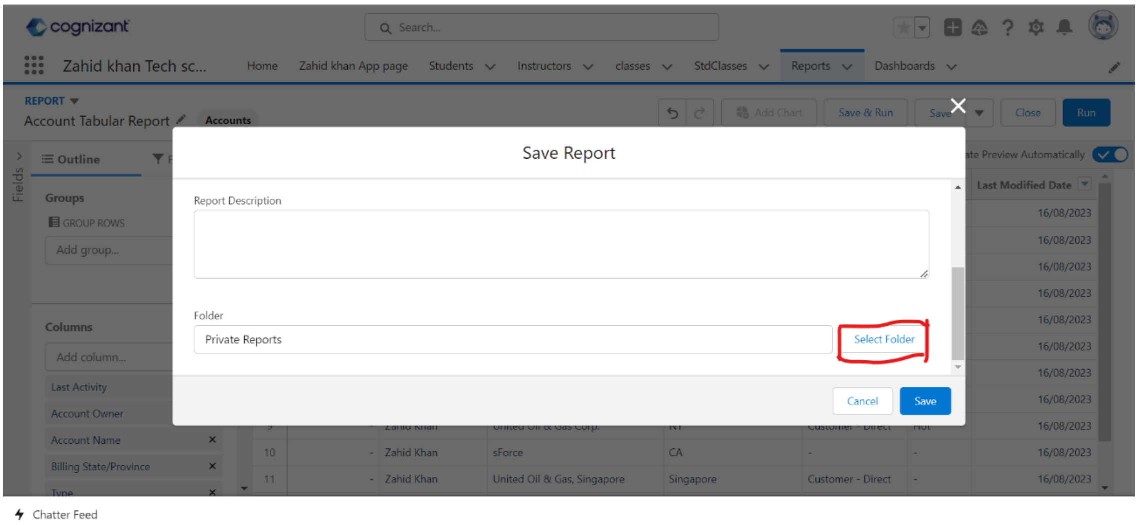
- Now click on Run we will see all number of records. For edit the records again click on edit.



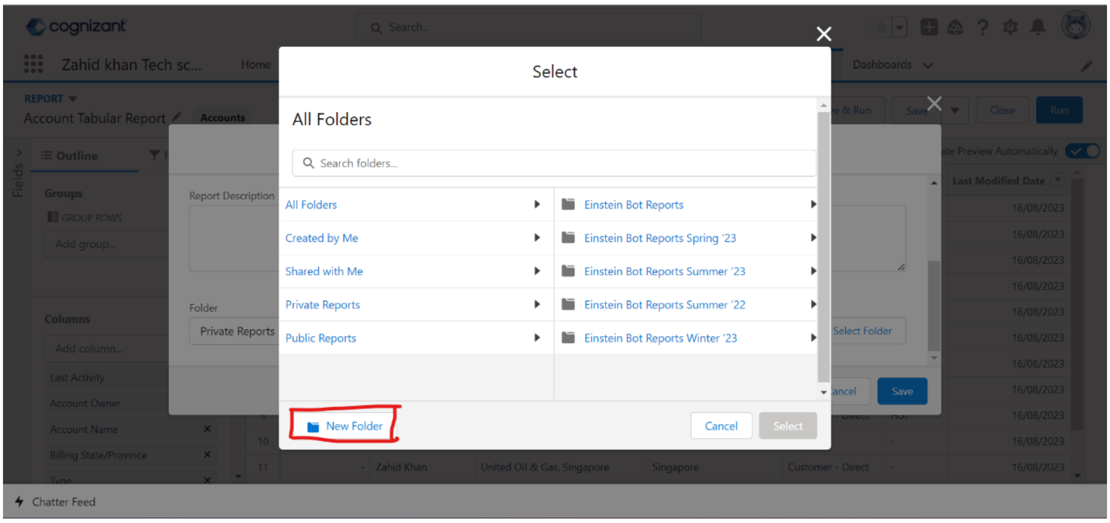
- Now click on **save** on right hand side to add the report in folder because every record should be added in a report folder. After that enter Report name which is already filled then press Tab then Report unique name will be automatically filled.



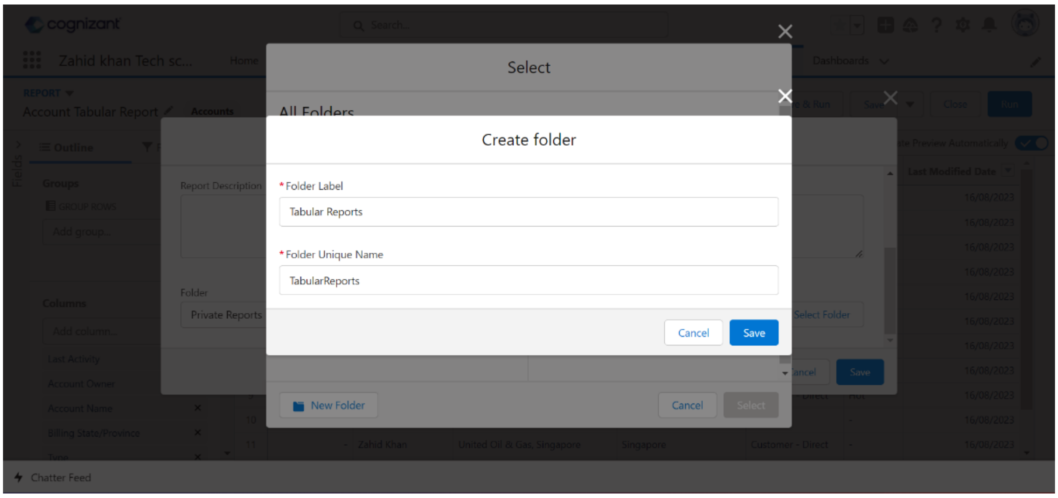
- Scroll down on save report page we will see a **Folder** drop down which is set to Private Reports but its good practice to save records in own folder. For creating a saving a report in own folder click on select folder option.



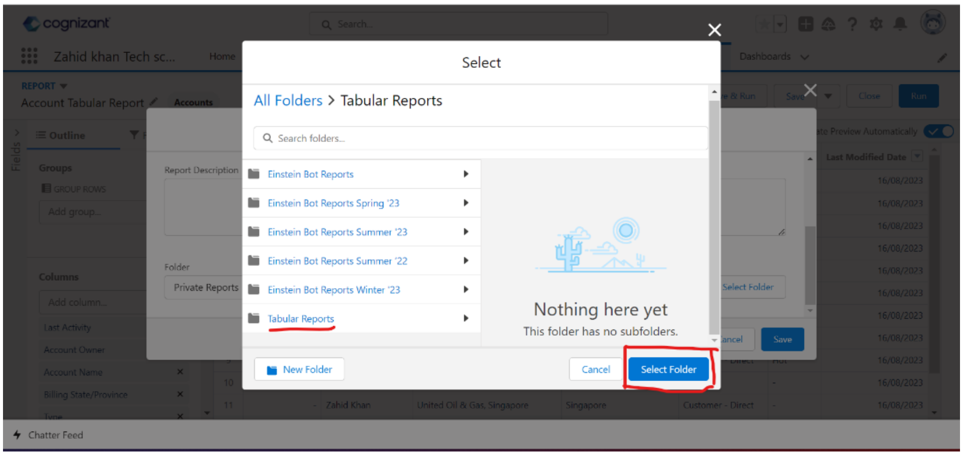
- now click on new folder option at bottom left side and make a folder named as Tabular reports. We will use this folder for all tabular reports.



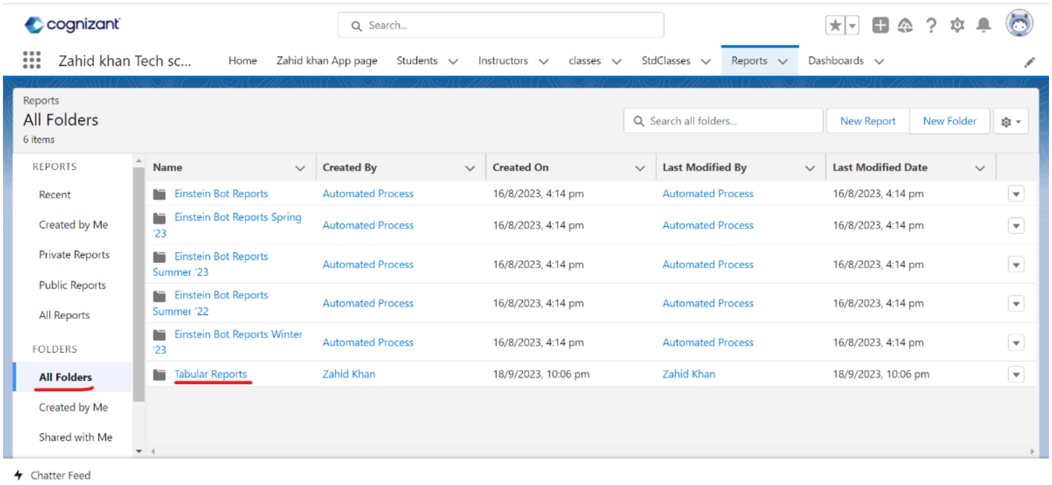
- After that enter the folder label and press tab button then unique folder label will be filled. And click on save.



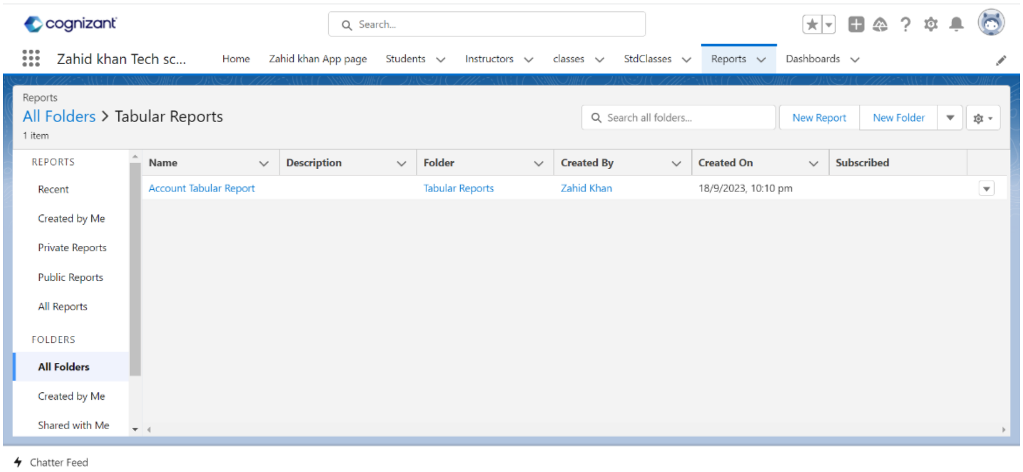
- Now Tabular Reports folder is created select this folder and click on select folder button.



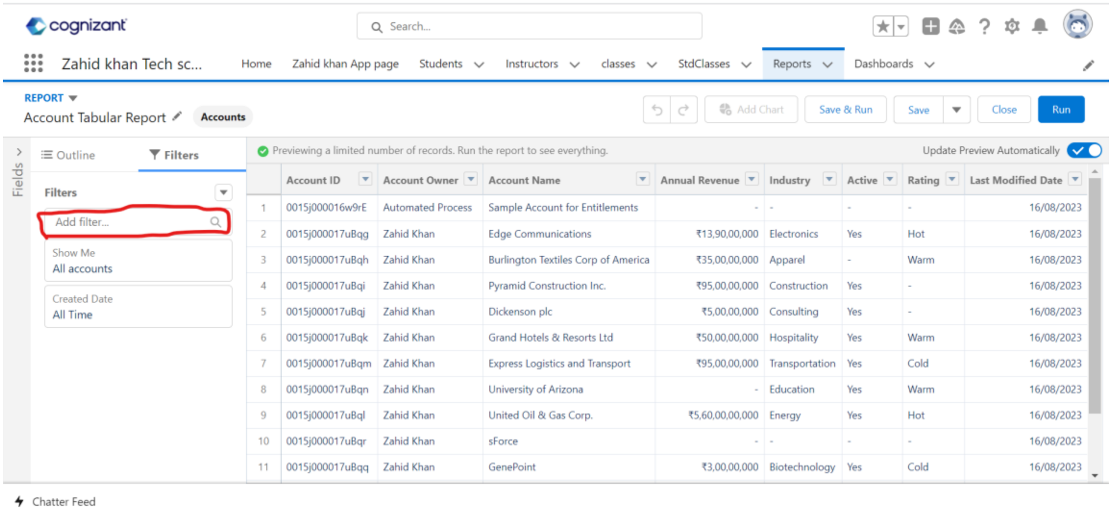
- After that click on save. Now our Account reports is saved in Tabular reports folder.
- Now click on close and go to first page of the reports.
- Now click on All folder. After that click on Tabular Reports folder.



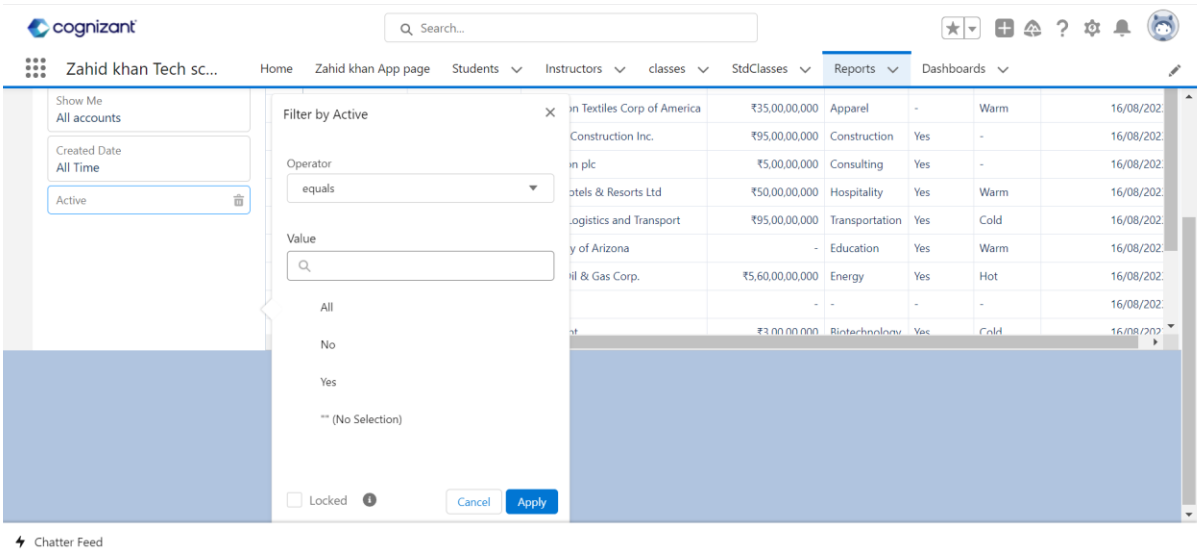
- In tabular folder we will see the Account tabular report which we created. If I open it, I will see the records.



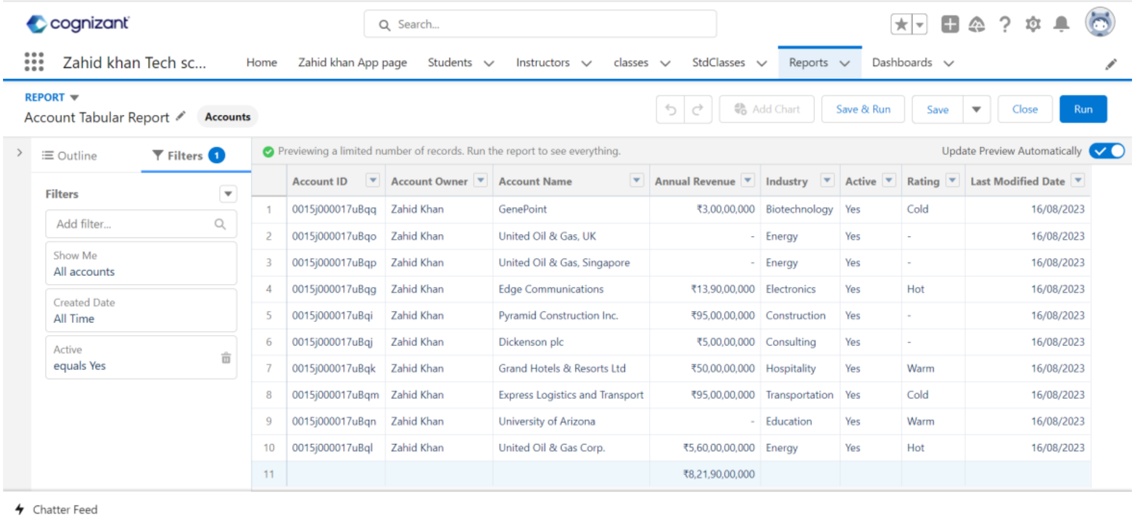
- **2nd type filter-** Now we apply **Specific field filter** (custom filter) to the report. For example, we are applying custom filter for active if active is yes then its show only those records.
- For custom filter open reports from folder and click on edit. After that click on filters on left hand side.



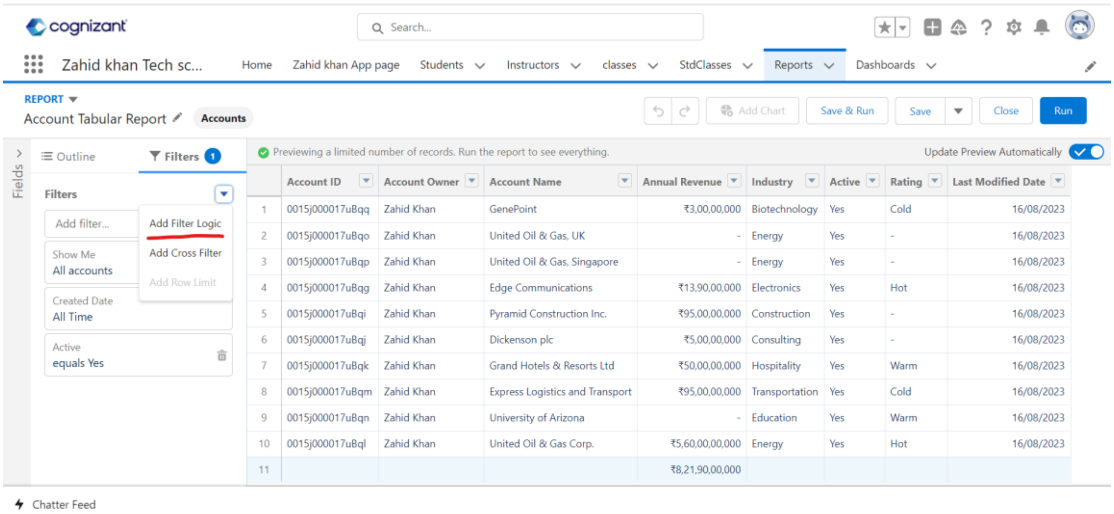
- After that search Active in **add filter** search box. And click on active then we get operator and value yes, no, all. select yes and click on apply.



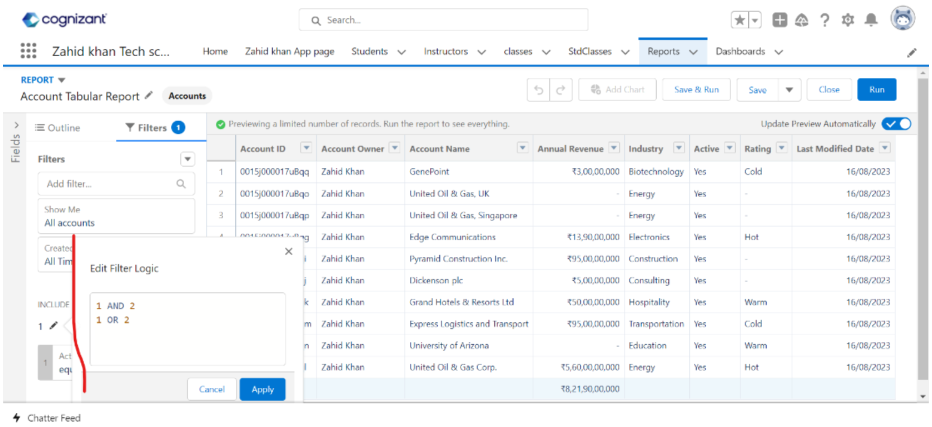
- Now which Active is yes will show in reports. It's also called specific field filter.
- After that click on save and run the reports.



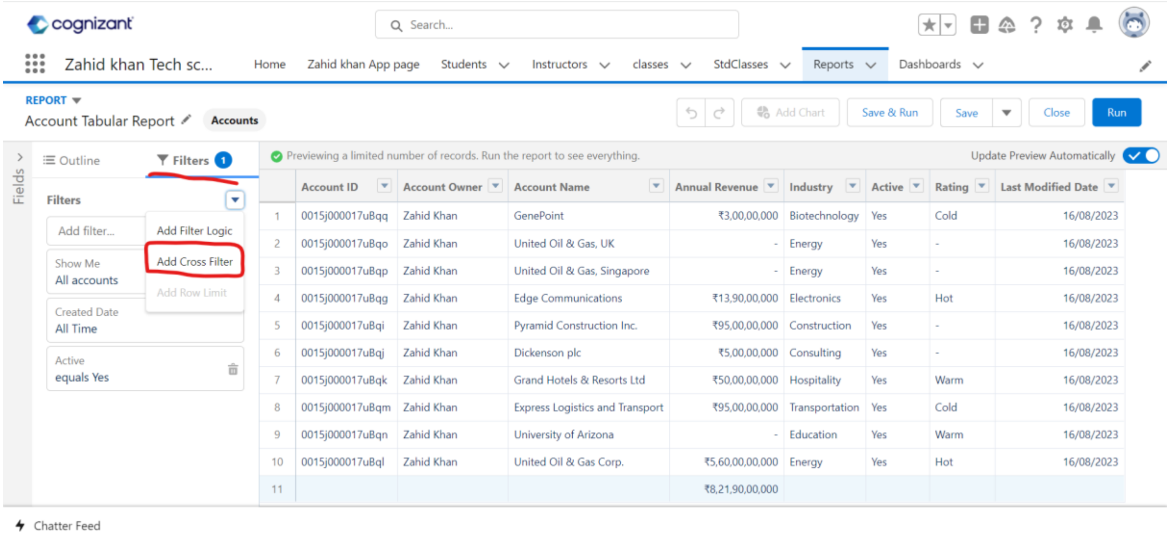
- **3rd type filter-** For Apply the **Filter logic** first set 2 Specific filter (custom filter) then click on arrow beside the Filters option and apply AND or OR Boolean operation.



- We can apply AND or OR Boolean operation between more than 2 custom filter. And click on apply. Like show in below image.

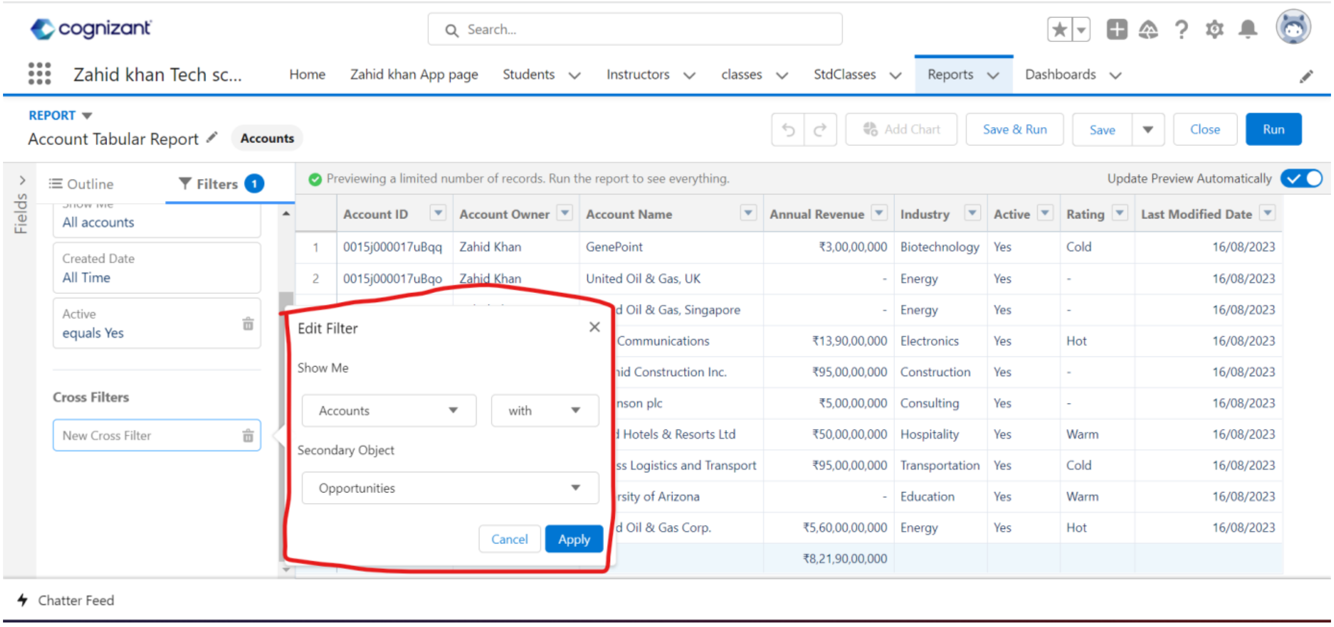


- we can apply 4th type of filter called **cross filter**. For this open reports from folder after that click on edit then click on filter from left hand side menu and click on arrow beside filter and choose add cross filter.

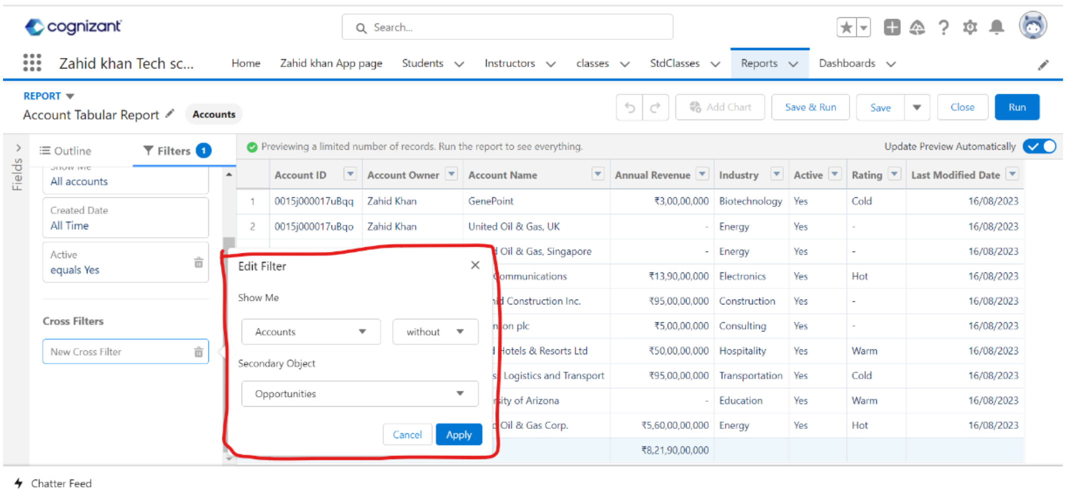


- As we know cross filter work with and without child object. For example, in below image we have records of account then need to select with or without and lastly secondary object (child object). For example, we are selecting with and secondary object opportunities. It means that only those reports will be shown which contain opportunities. If we select without so its show reports of account which does not contain opportunities.

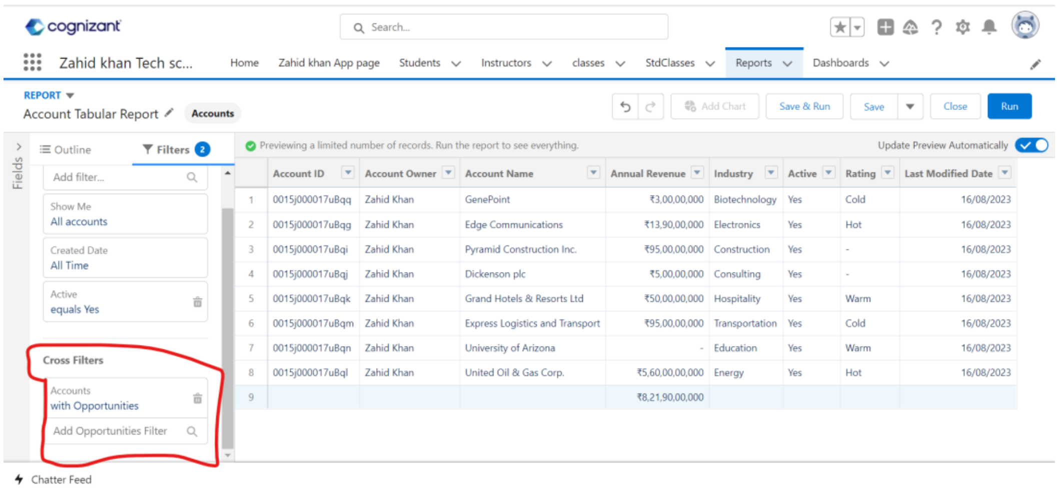
I. with



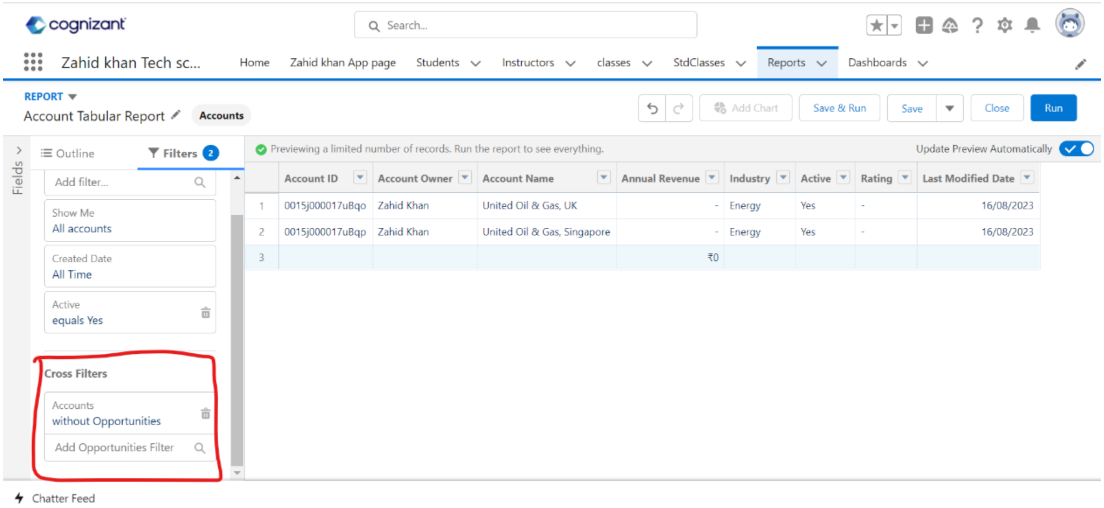
II. Without



- **With opportunities (child object).**



- **Without opportunities (child object).**

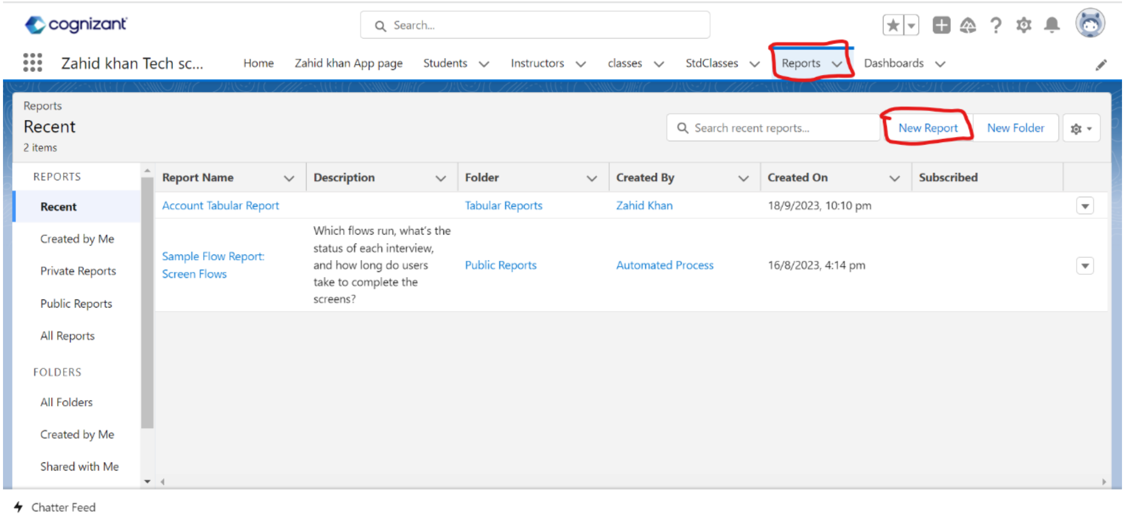


<u>Summary report</u>

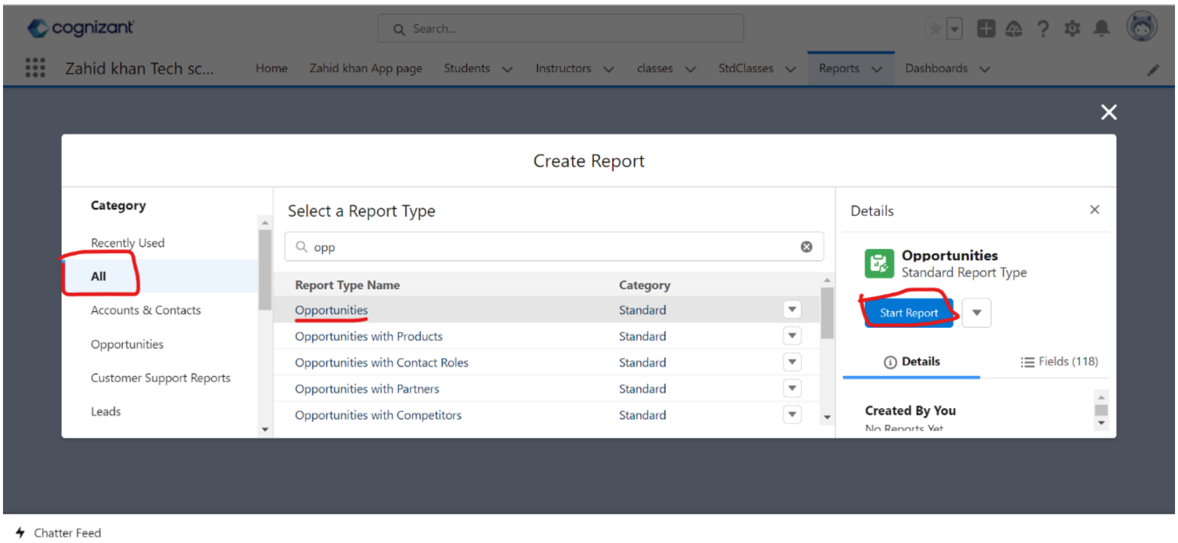
- Summary reports only based on Row and column.

<u>Steps to create summary reports:</u>

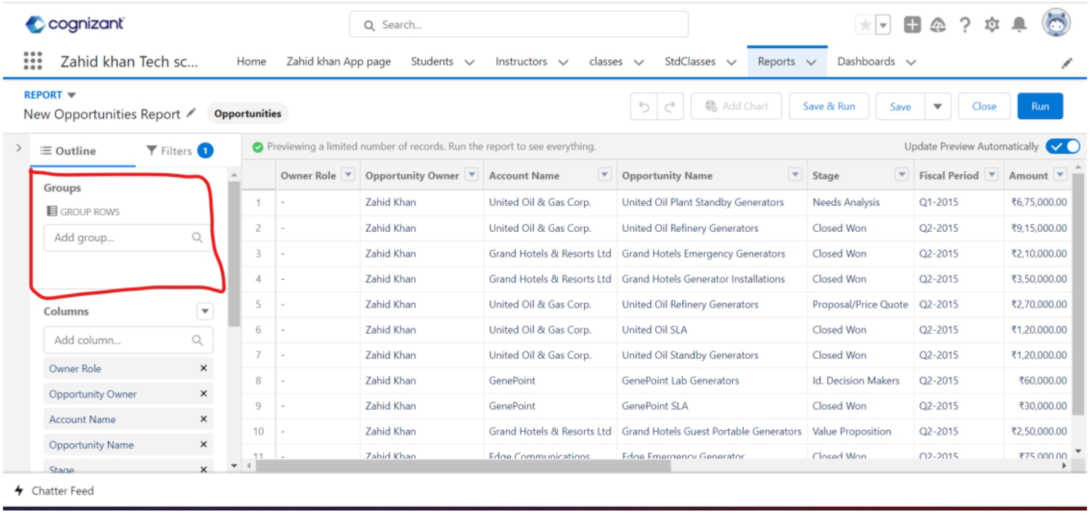
- Go to App front-end and click on reports tab after that click on new report.



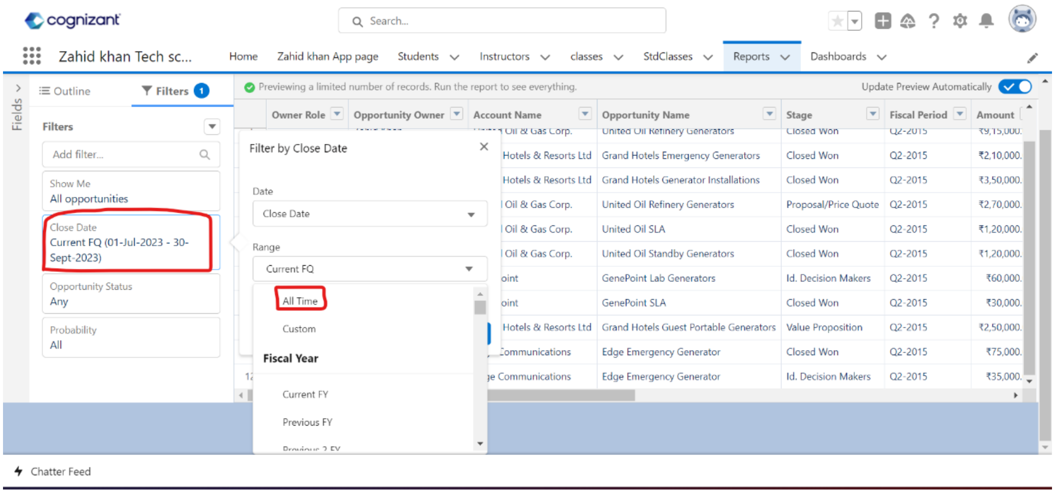
- Now click on All from left side menu and search for Report type. For example, here we are making summary reports of opportunities record type. After that click on start report.



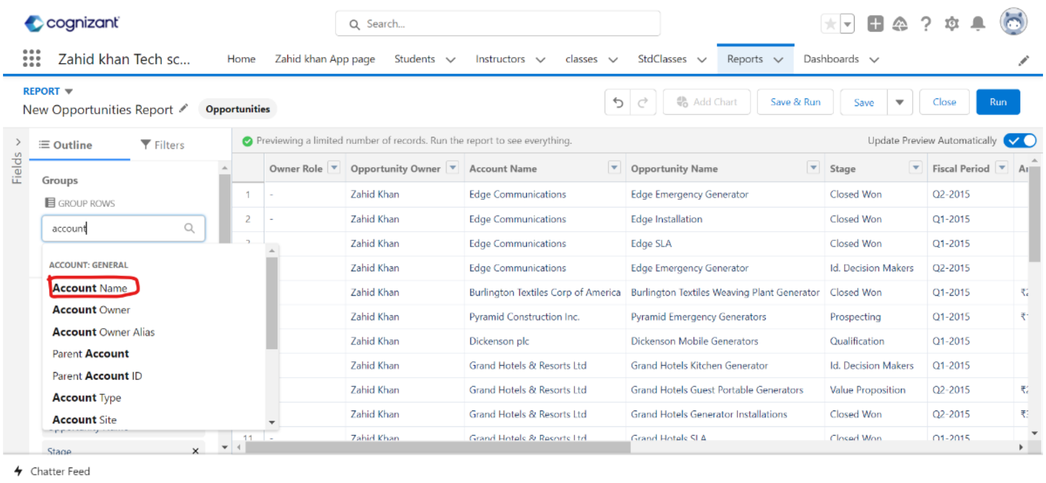
- Now summary report is based on grouping, so we have to focused on Group session. We can group the report using any column in our reports using **add group** search box.



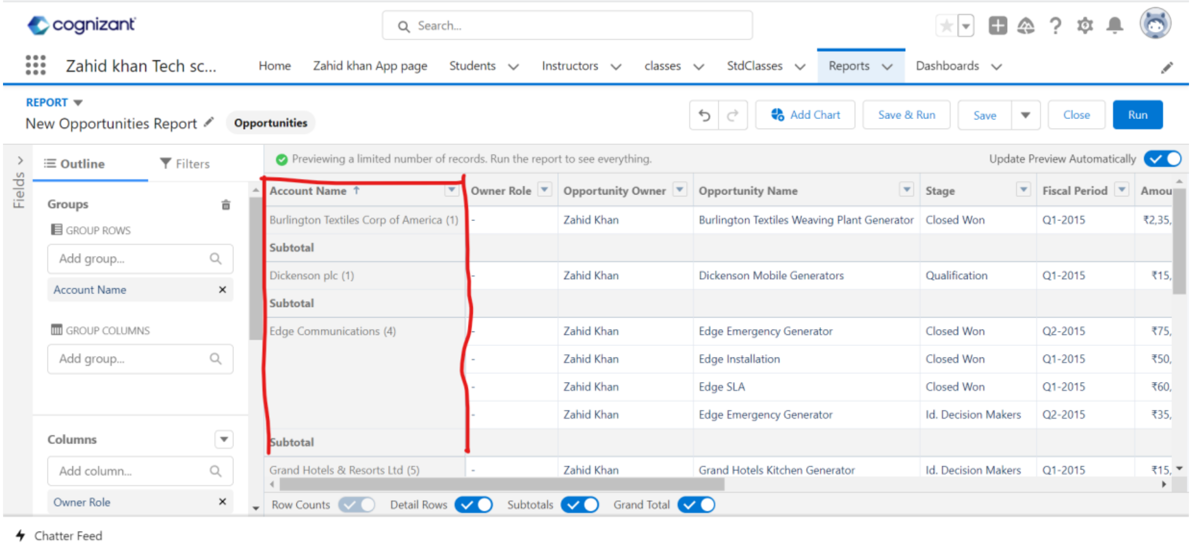
- before apply grouping go to filters and change the Close date to All time so that we can see all the records. And click on apply. Now we got all records.



- After that we can apply grouping in summary reports using **Groups** session. For example, we are using **Account name** for group reports.

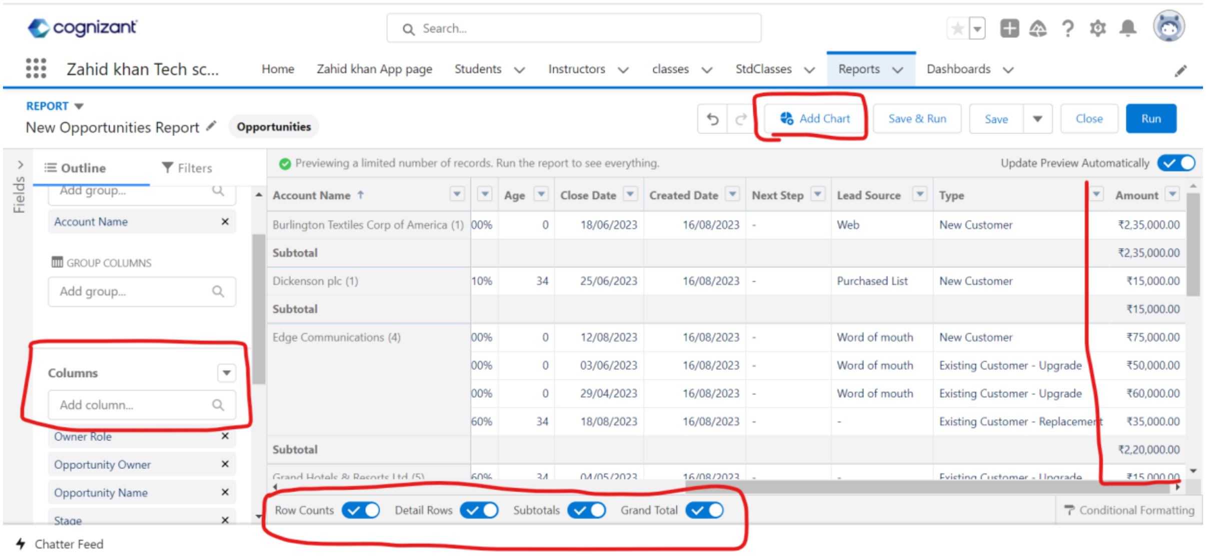


- After grouping in summary reports using account name, we will see the multiple reports for one account name instead of repeating the account name for all



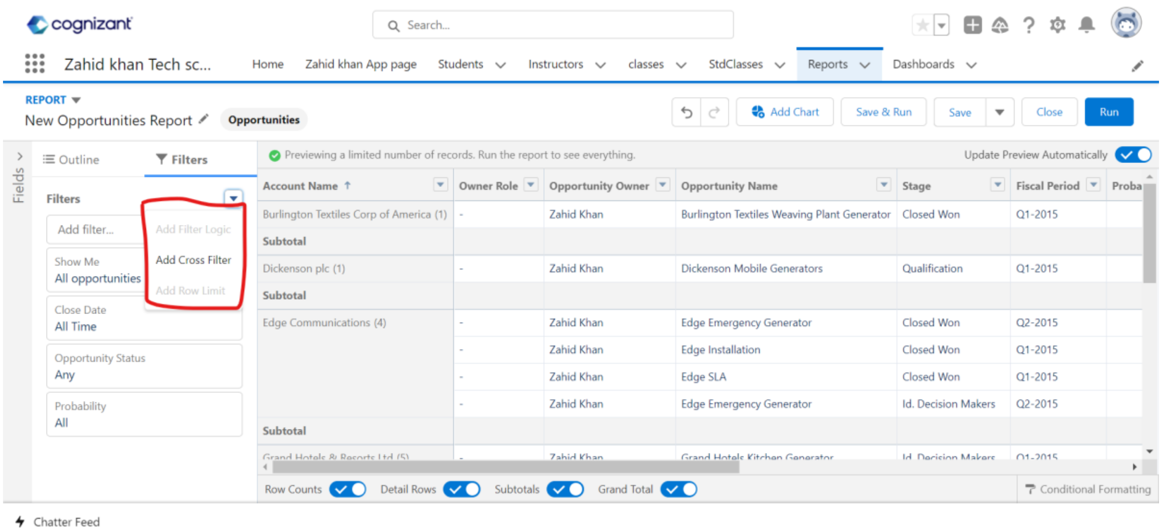
records.

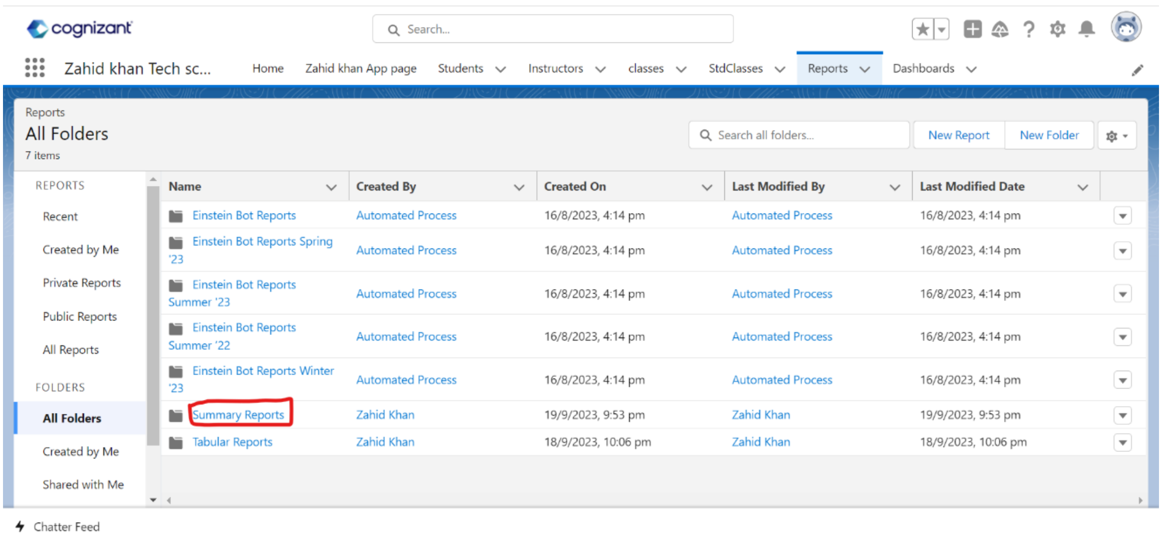
- Amount column in reports in not showing subtotal correctly so remove the amount and enter again by searching amount in column section and add it. After that we will see amount subtotal.
- We can also see the **Add chart** option which is not available in tabular reports.
- At bottom of the reports, we have options subtotal and grand total toggle button. If we want this, then we can on it or disable.



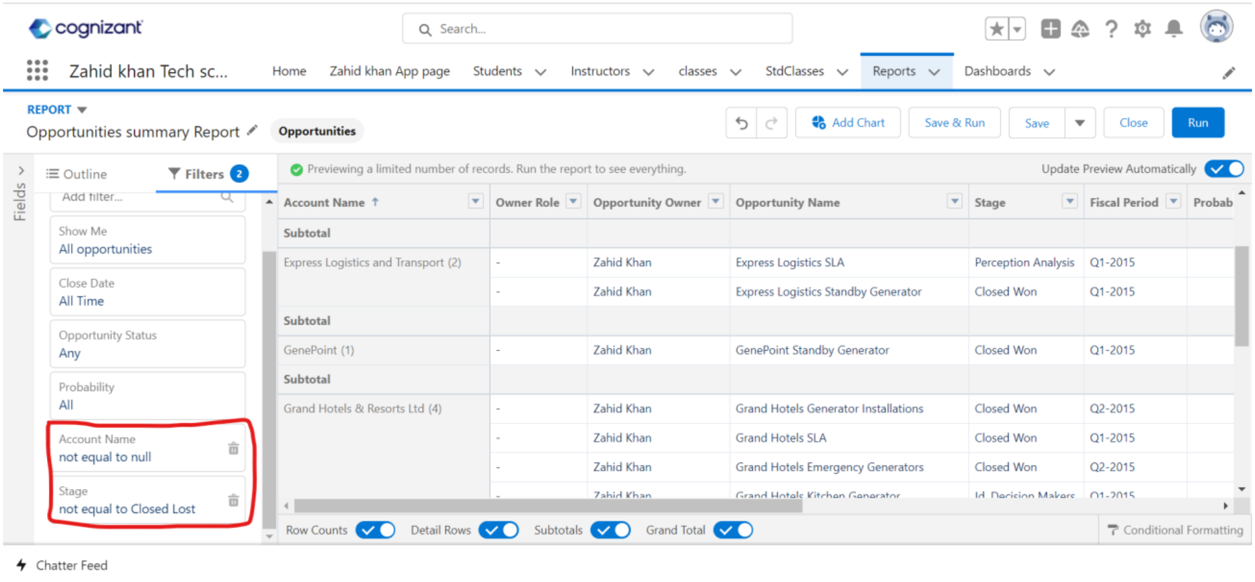
- Rest of things are same as tabular reports we can apply all 4 types of filters using filter section from left hand side.

- In filter section, we will not see the add logic filter because we are not applying any custom filter. After applying we are able to apply the logic filter. We have one more option in filter to limit the row.

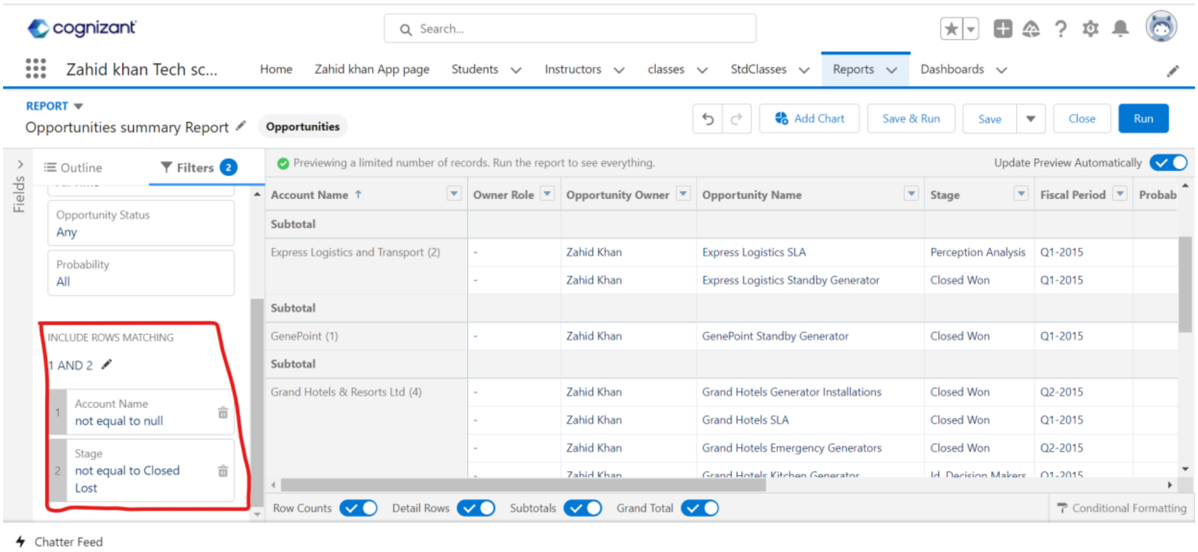


- After making reports now save the reports by creating a folder same as tabular reports name the folder as Summary reports. All the summary reports we can save inside this folder.
- 

- Now we are applying Field specific filter (custom filter). For apply custom filter we have to search field from **Add filter.** For example, we are making custom filter for **Account name is not Null** and **Stage is not closed lost**. So that reports will show only those data which satisfy these criteria.

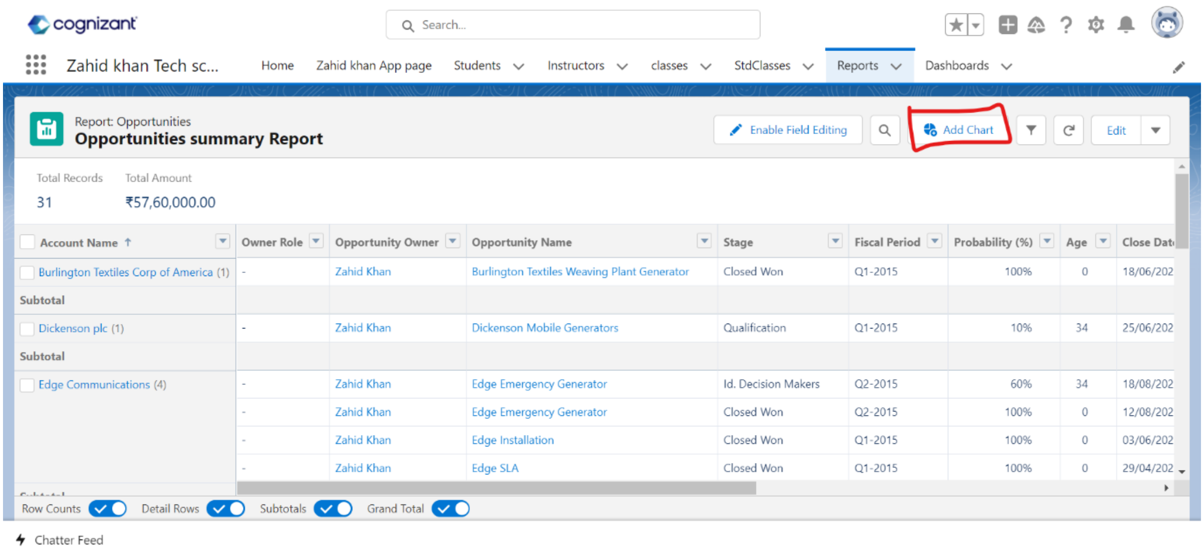


- Now after applying custom filter, we are able to see the Add logic filter option. For example, we are going to add logic filter like Account Name and Stage should be True. So, we are going to add AND operation. This is how we can apply logic filter.
- in same way we can apply cross filter like tabular reports.
- Now to save the records click on save.

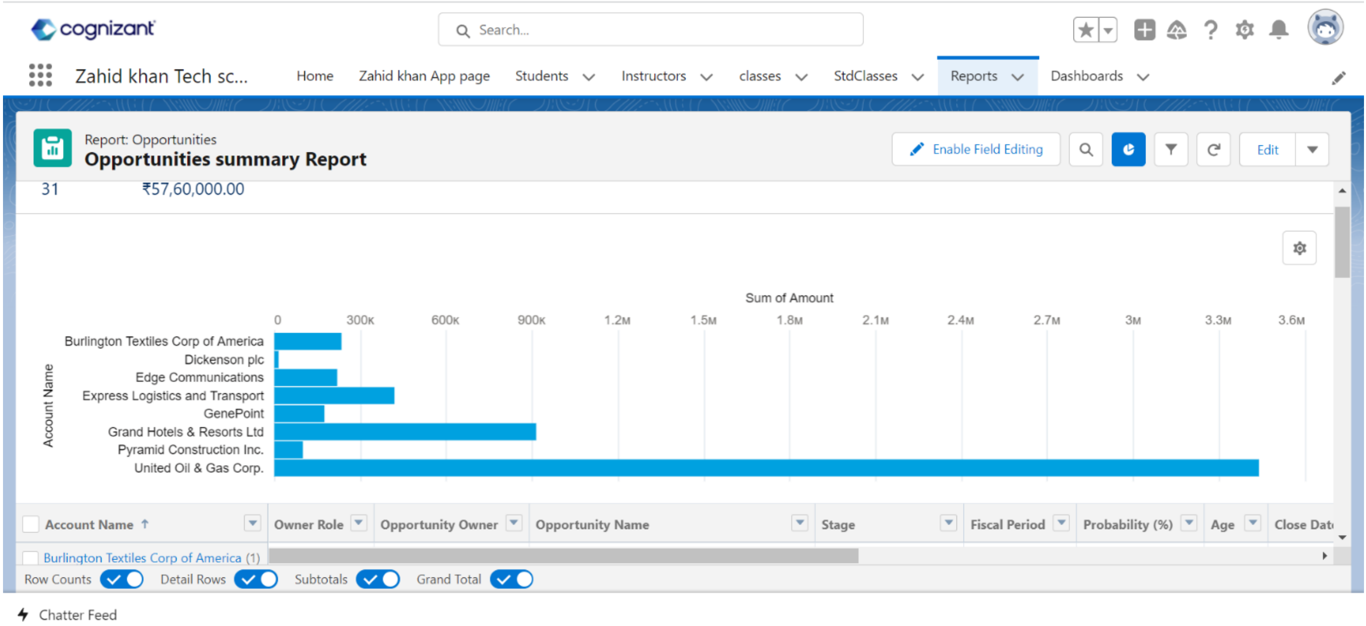


Steps to Add chart in summary Reports:

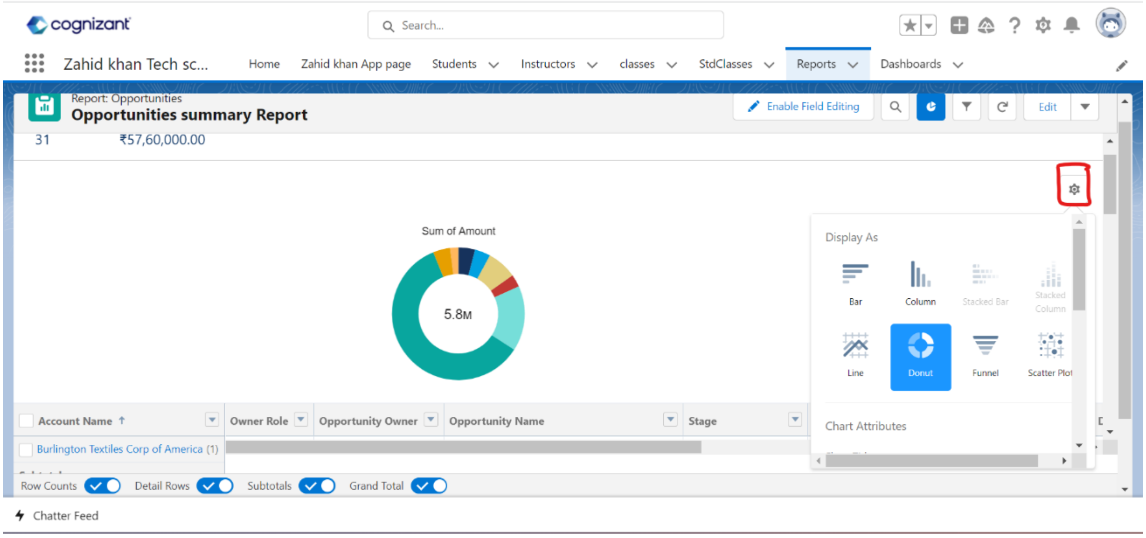
- As we know that we can add chart in summary and matrix reports only.
- For adding chart in summary report. Open the records from summary folder in which you want to add chart. And click on Add chart.



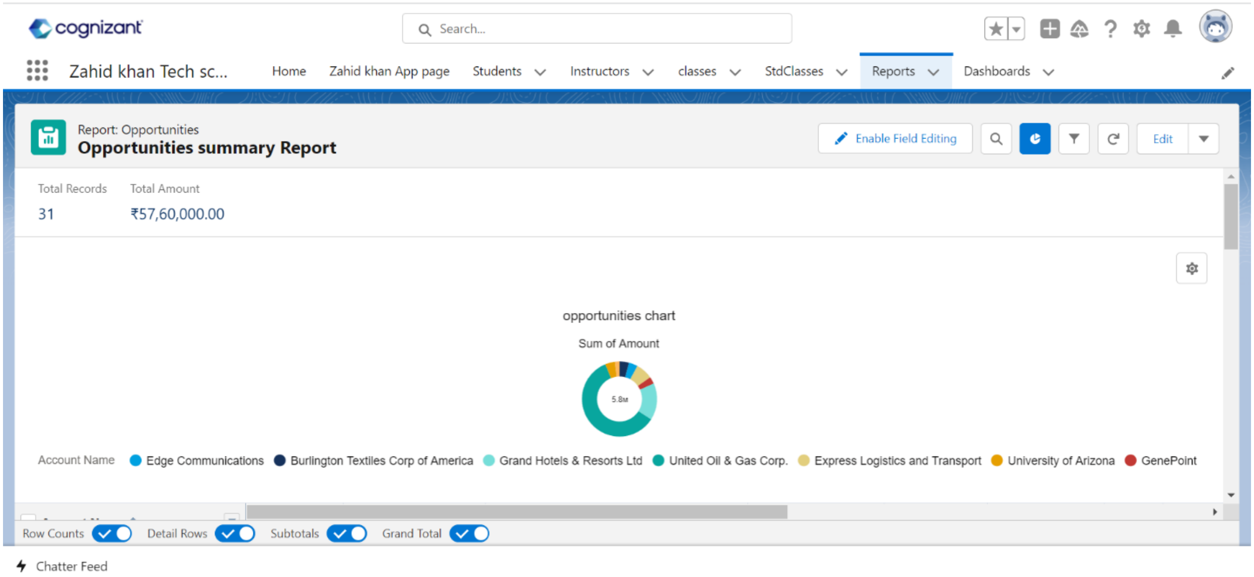
- After clicking on Add chart we will see the chart will appear on the page along with reports.



- By clicking on setting icon on chart we will add different types of charts.



- Inside this setting icon we have an options chart attribute. In which we add chart title, value, sliced by, and legend position to right and bottom. We can adjust these based on project requirements.
- Now click on save to save the reports with chart. After that click on run to see the results.

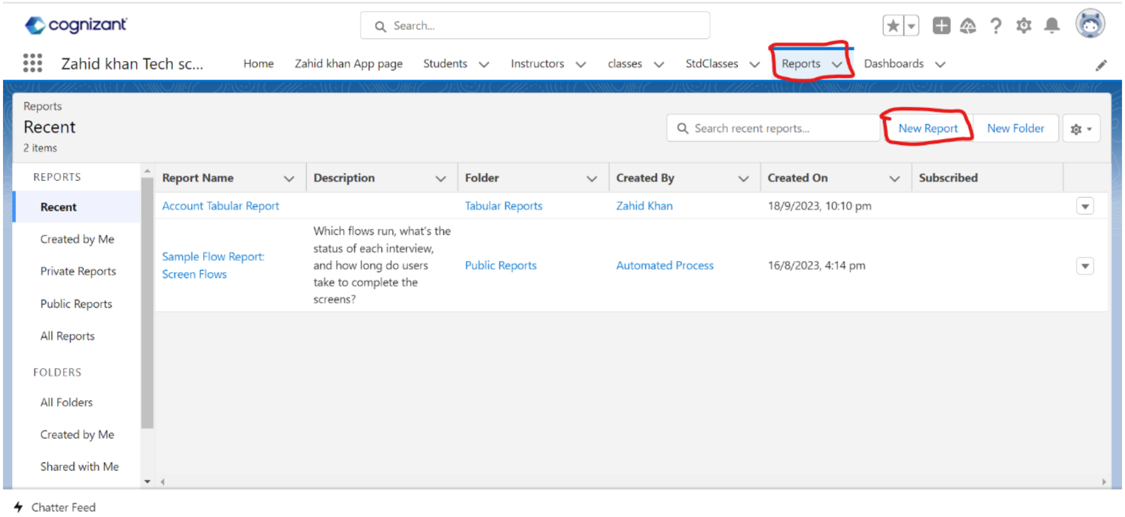


Matrix reports

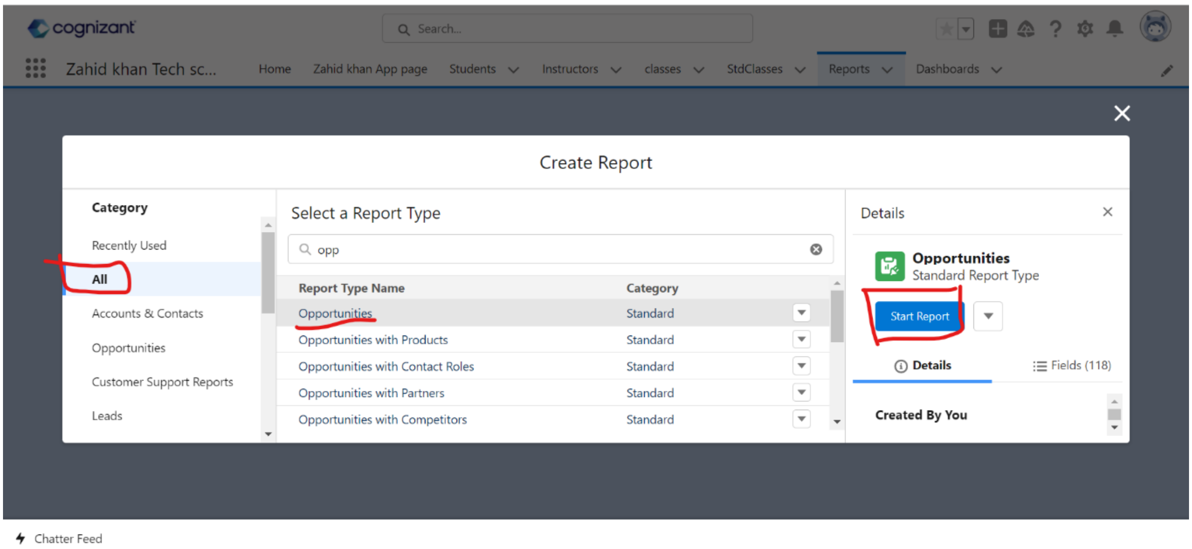
- Matrix reports based on Rows and column.

Steps to create matrix reports:

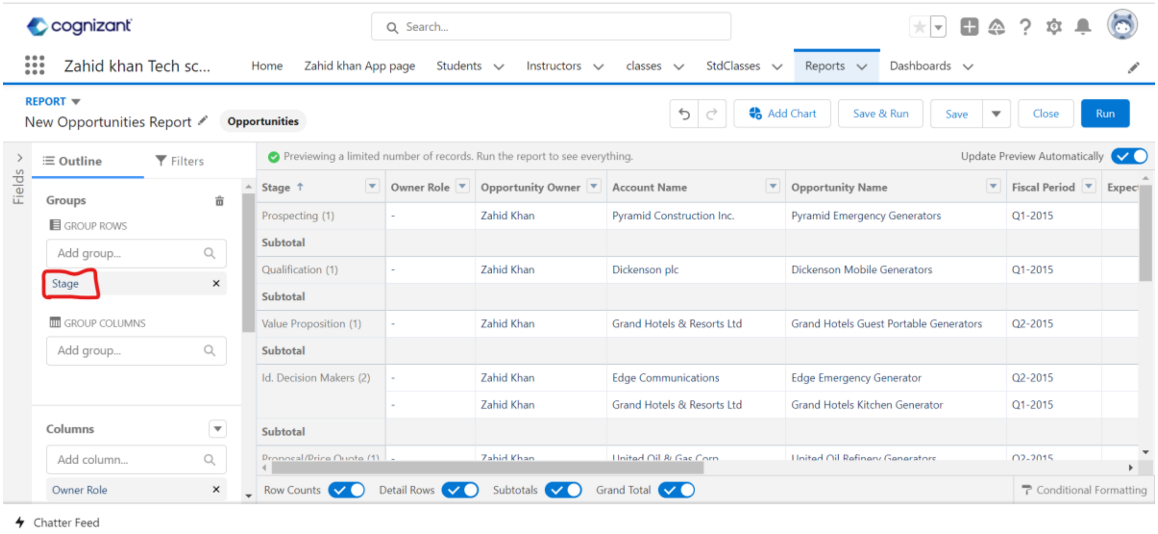
- Go to App front-end and click on reports tab after that click on new report.



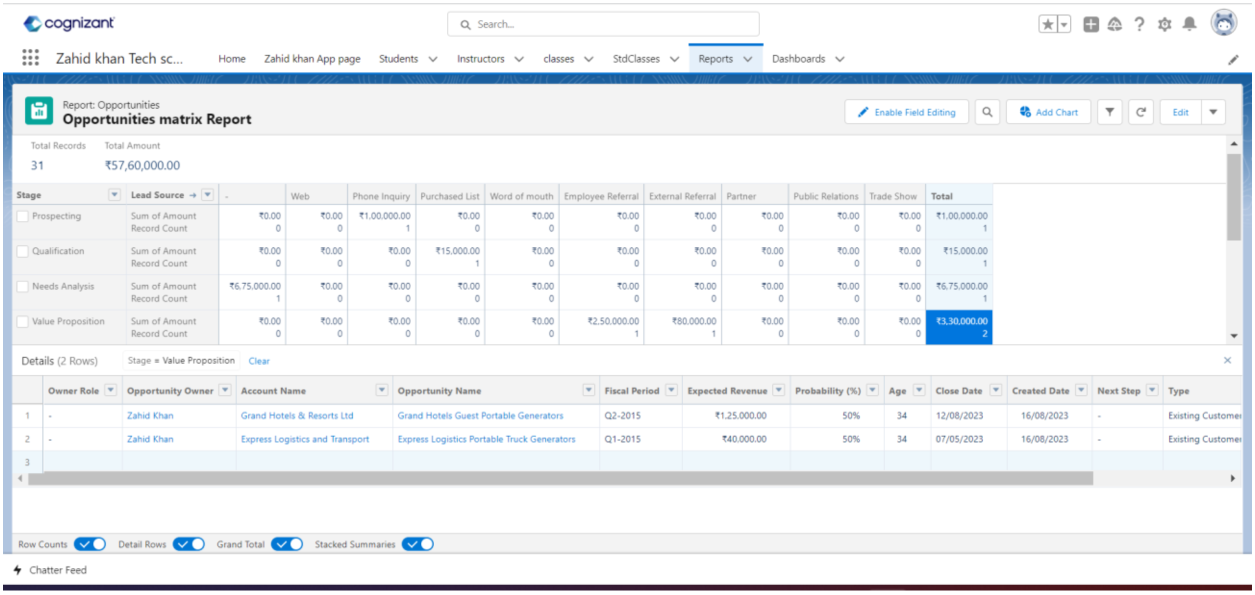
- After that click on all and search for report type. Here we are choosing opportunities for report type. After that click on start reports.



- After that go to filter and in close date choose All time to show that all data in reports.
- Now go to outline and add group rows by entering Add group name in Group session. For example, we are group row using **Stage**. So, the reports is grouping using stage.



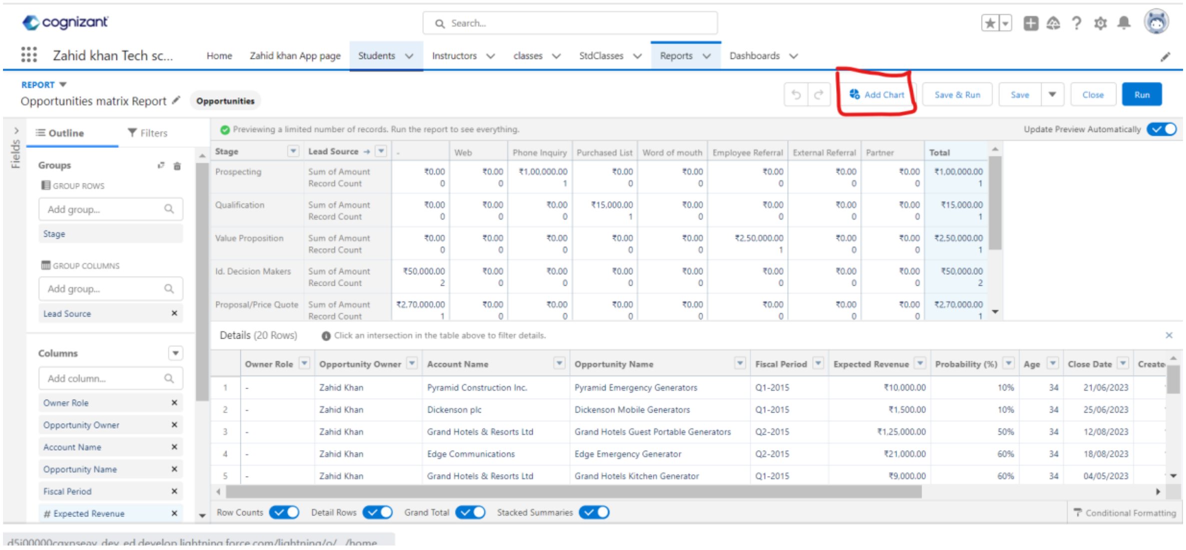
- After adding group row, we have to add group column inside group session to create matrix reports. For example, we are entering lead source.
- Now save the reports in matrix folder by creating it and run the report. This is how matrix report look like.



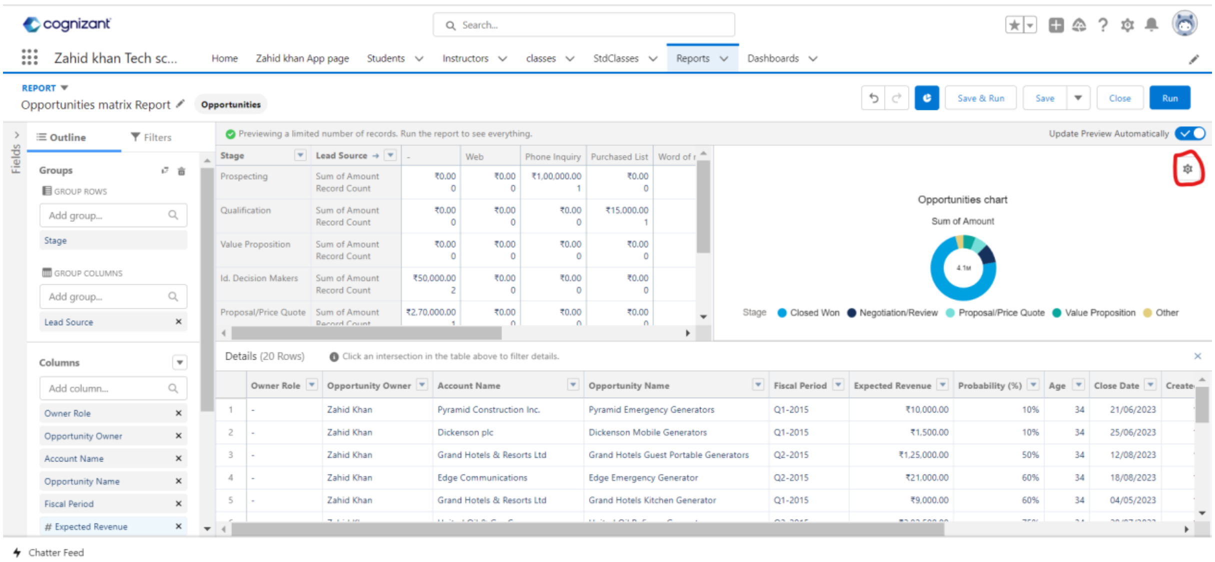
- By clicking on cell of Stage we can see the related reports details.

Steps to create chart in matrix Reports:

- We can add chart for matrix report same as summary report.
- Open the reports from matrix folder and click on edit. After that click on Add chart option on top



- By click on setting icon beside chart we can add any chart. Inside this we have same option as summary chart title, value, sliced by Stage or Lead source because we have both in reports and legend position.
- Matrix chart will show beside the matrix reports. Now save the records and click on Run.



- We can add anything related to chart using this setting icon.

Day-09

Reports on custom object

- To make reports on custom object we have to understand about reports type.
- We have to enable reports type in custom object.

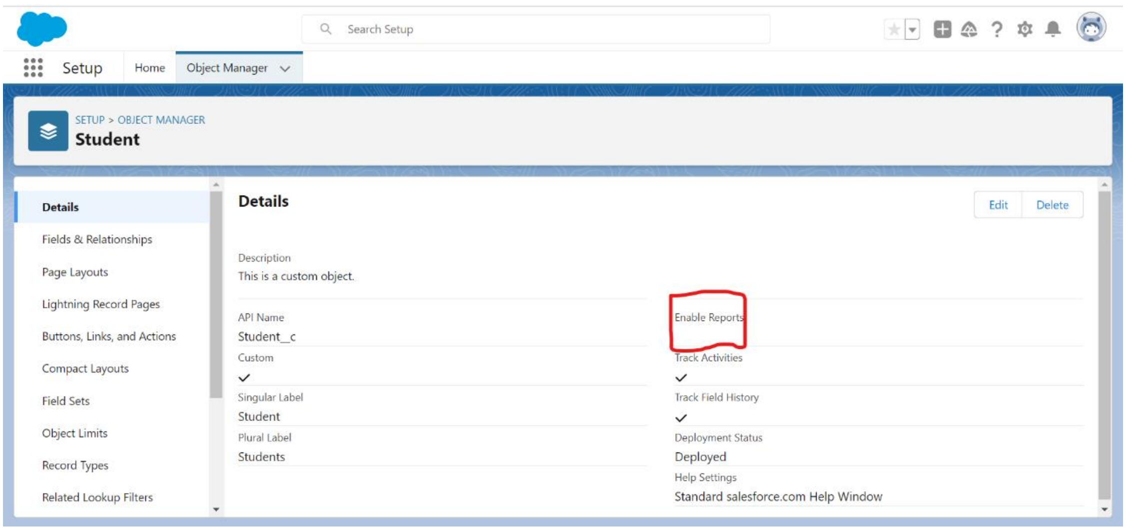
Report types

- Report type is like a template for reports.
- Report type determines which fields and records are available for use, when one is creating a report.
- This is based on relationships between a primary object and its related objects.
- For example, account with contact report type, account is primary report and contact as related object.
- Reports display those record that meet the criteria defined in report types.
- For example, when we create new report and searching for record type of custom object so it will not available because report types of custom object is not active.
- While creating report we got 2 options.
    1. Primary object with related objects.
    2. Primary object with or without related object.

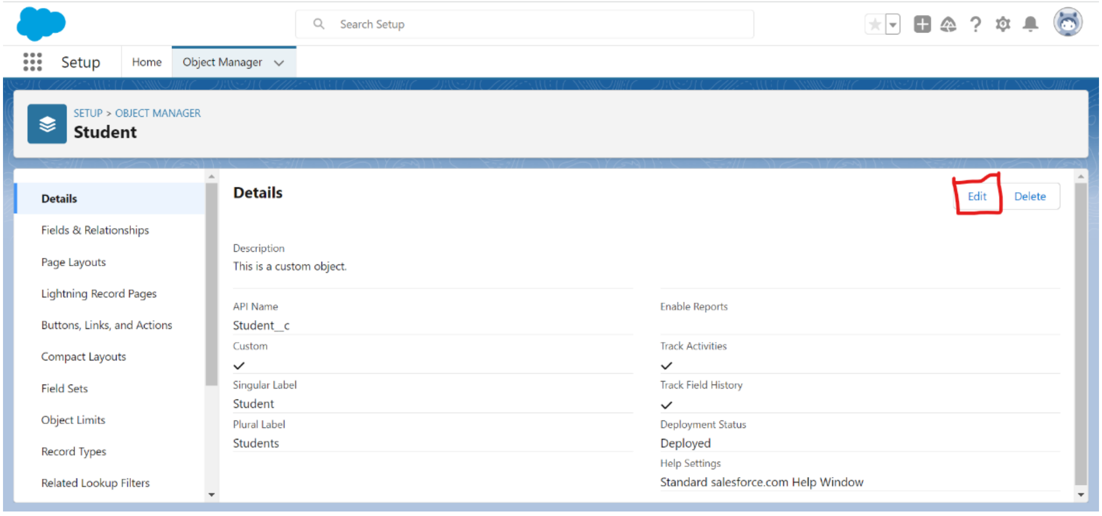
Steps to enable reports custom object:

Before making reports on custom object, we have to **enable reports** on that object. For example: we are enabling reports of student object.

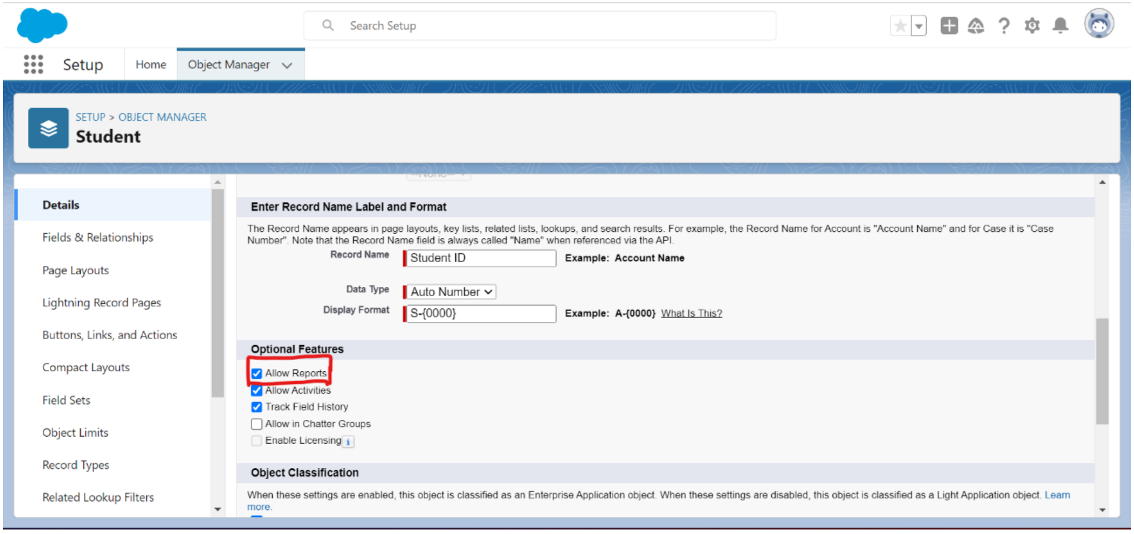
- Go to setup and click on object manager after that search for student object (custom object). And open student object. We will see in detail that **Enable reports** is not active, so we need to active this.



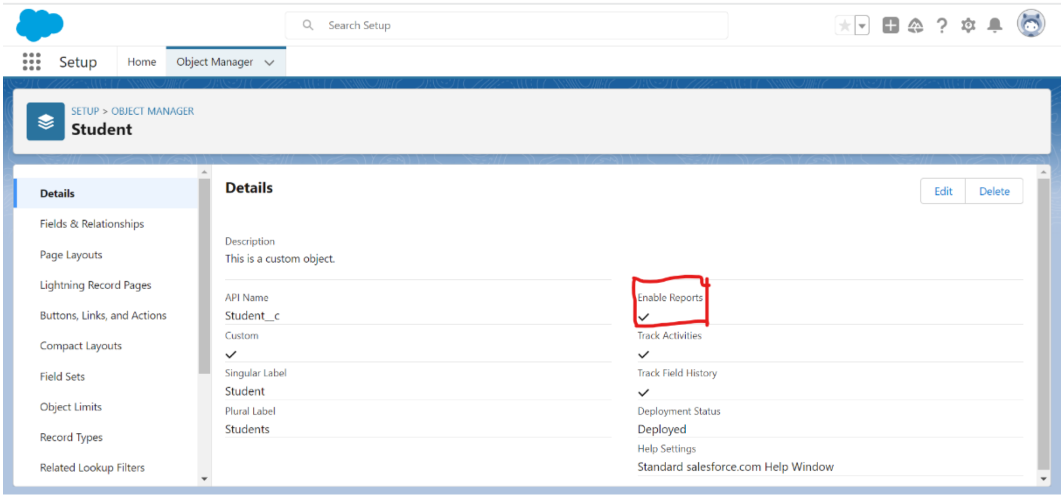
- For active enable reports click on Edit.



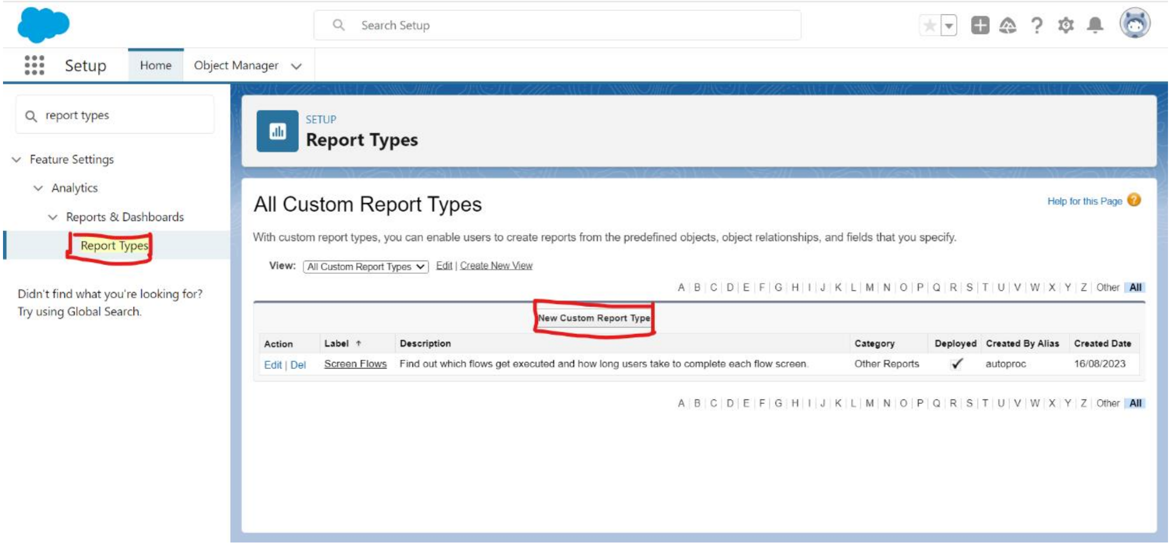
- In optional features select **Enable report** option. And click on save.



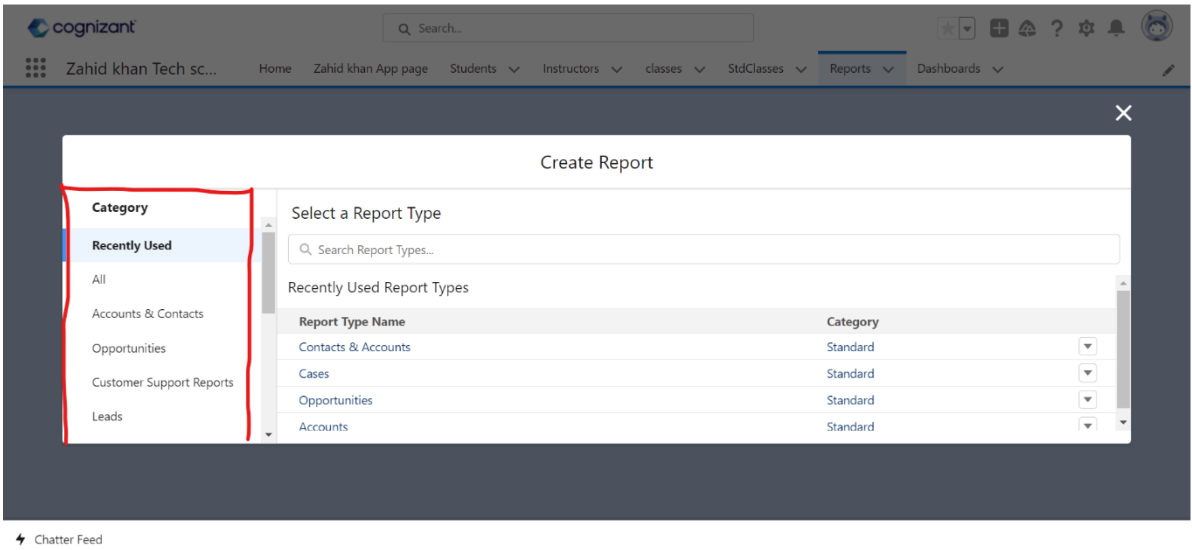
- Now click on details page we will see that Enable report option is active now.



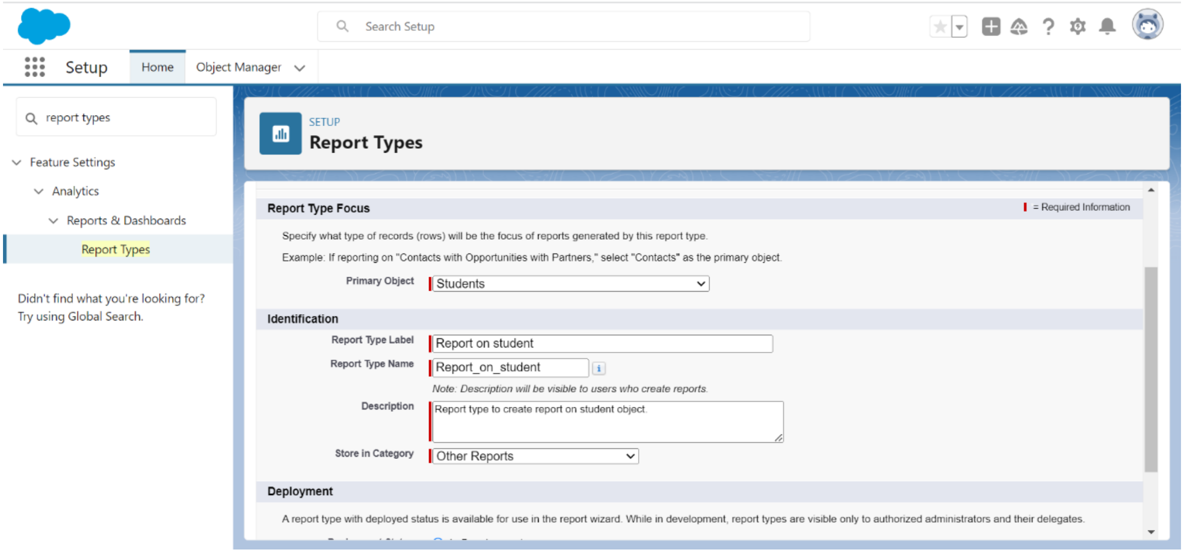
- now go to Home and search **Report Types** in Quick search box. After that click on Report Types. After that click on New Custom Report Types.



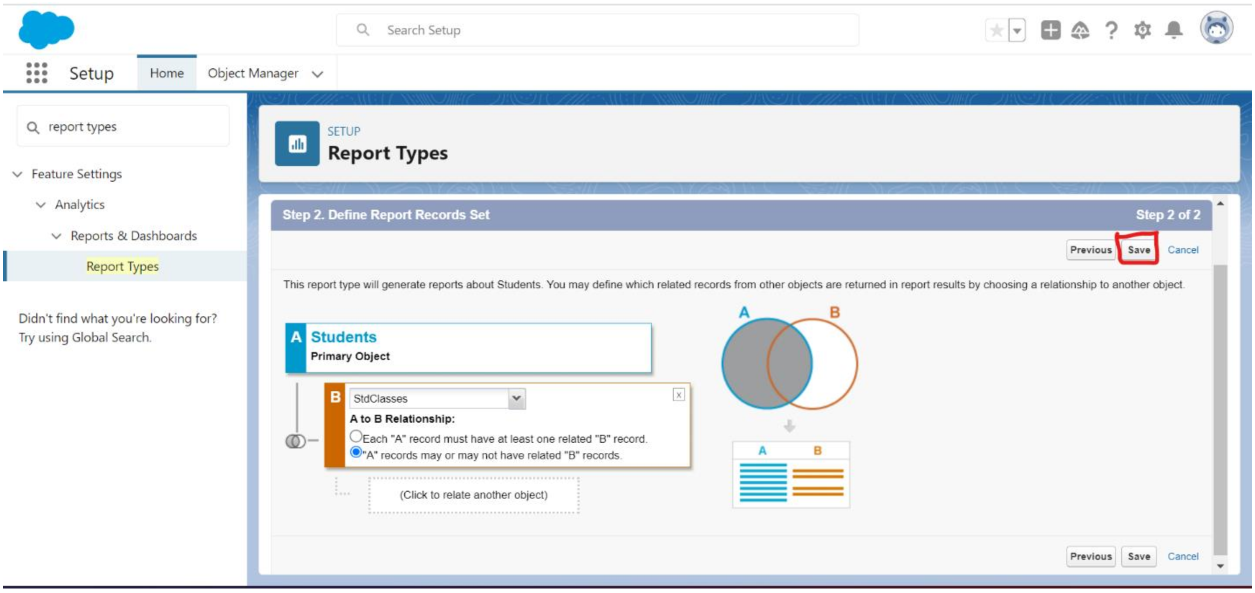
- After that we got 3 options **Report type focus**, **Identification**, and **deployment**.
   I. In Report Type focus we have to select the object (i.e., student object) for which we want to create report from primary object drop down.
   II. In identification enter Report type label, report type name, description, and store in category. Store in category means we have to select the category in which the custom object (i.e., student object) will store as show in below image. Here we select



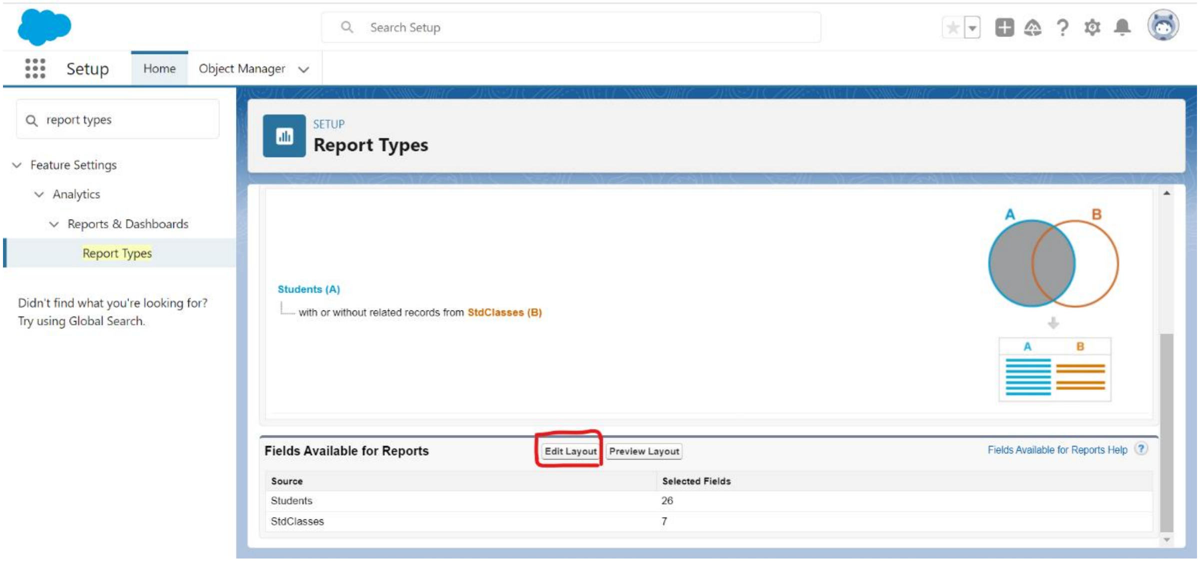
other reports.
   III. In development we have to select development or deployed. Here we are selecting development.



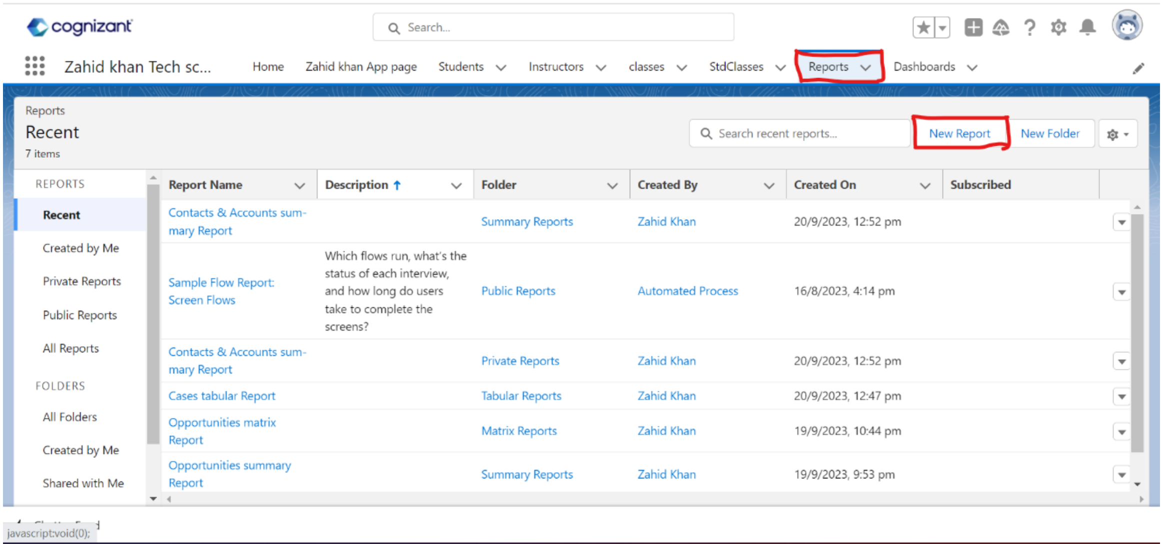
- now click on next. On next page we got define report records set. Which means **This report type will generate reports about Students. You may define which related records from other objects are returned in report results by choosing a relationship to another object.** In below image A is primary object and B is a secondary object. In B object we got 2 options, 1st Each A record must have at least one related B record. 2nd A record may or may not have related B record.
- Here we are selecting stdClassses as B object and select 2nd option. So all students record will available in reports. After that click on save.



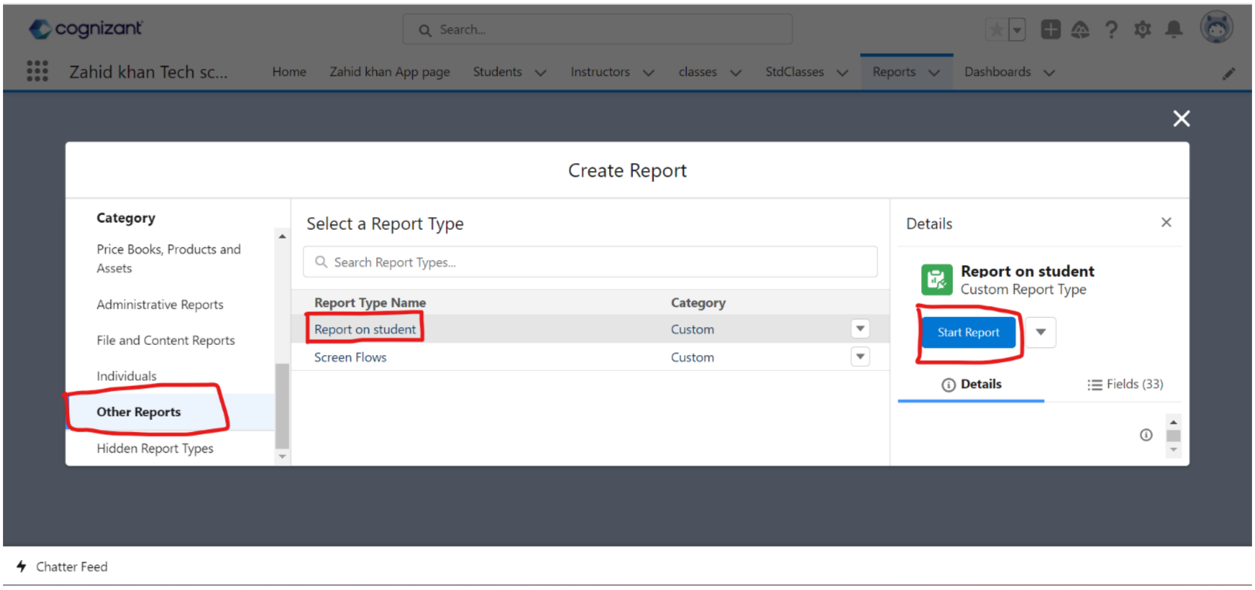
- After saving the page we will see how many fields in student object and in stdClasses object. If we want to add or remove any field, click on edit layout.



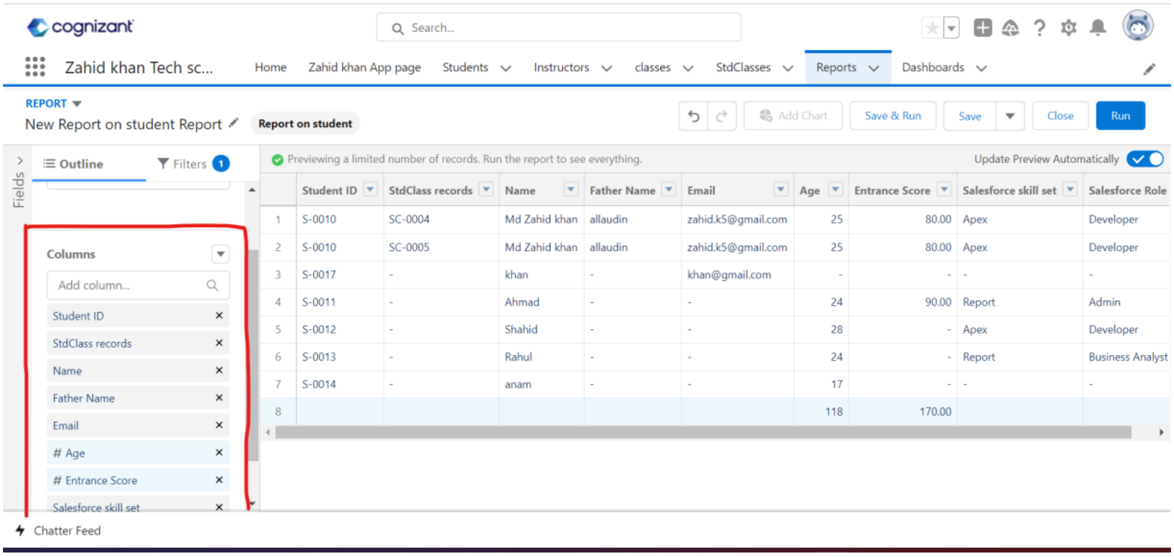
- on edit layout page we can see all the field if we want to remove or add any field so we can do in this page. We have edit properties button. By using this we can edit the name of any field.
- Now report types of student object (custom object) is created.
- Go to front-end and click on Report tab and click on New Report.



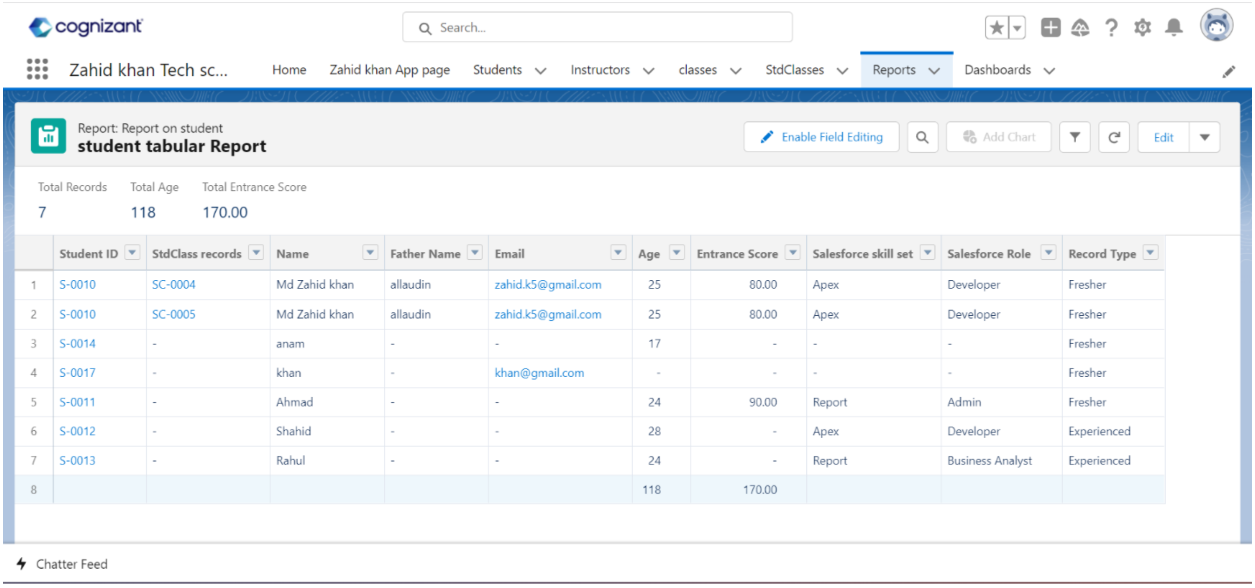
- After that click on other reports in category because we are saving student object in other category.
- Now we will see our custom report type name inside the other category.
- Now click on Report on student and click on start Report same as standard object records.



- Here we are creating tabular report for student object. Now add field from column section.

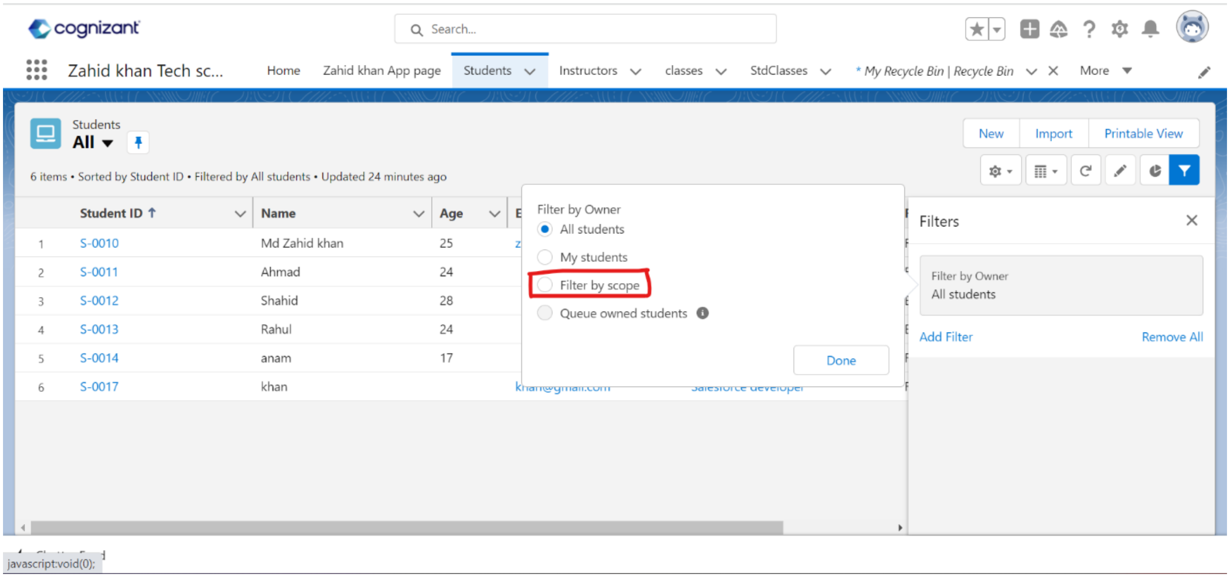


- We can apply all 4 types filter same as standard object report. Now click on save and save the report in tabular report folder which is created during standard object report creation. After that click on Run.
- Like standard object report we can create all 4 types of records for custom object.



Scoping Rule for Filter by scope

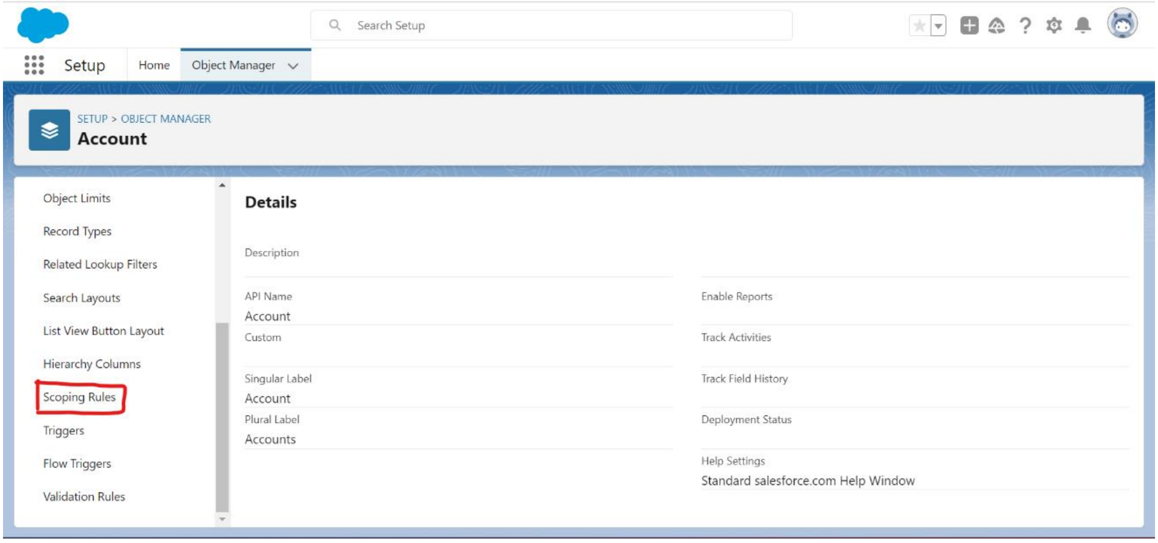
- We can see the option Filter by scope in list view filter. And in standard filter of report, we can see the Filter by scope.



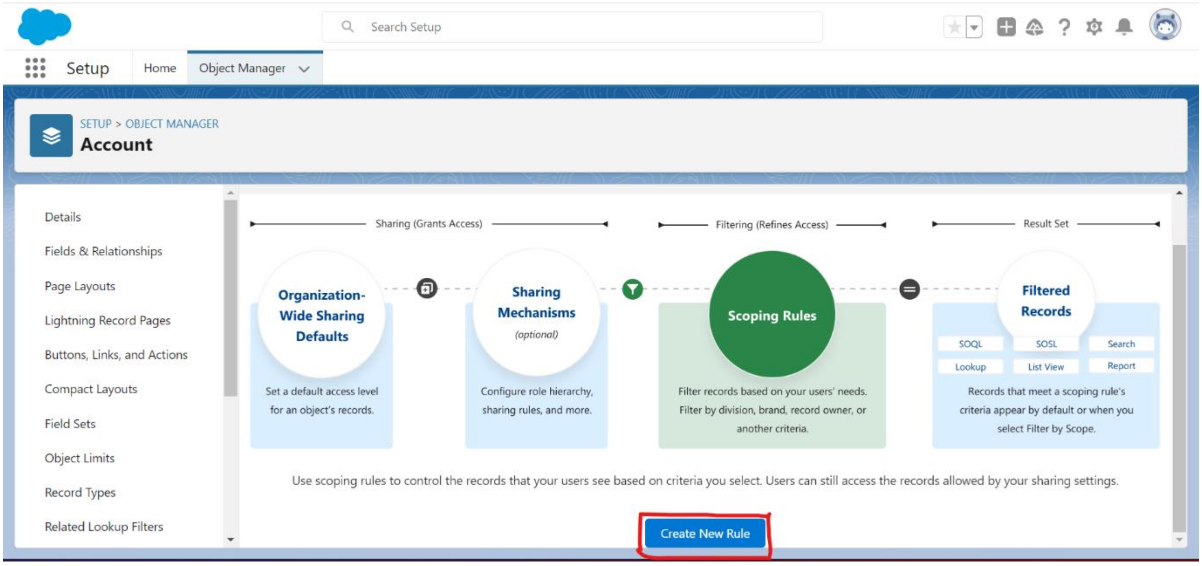
- To use filter by scope we have to set the scoping rule for that object standard or custom object.
- Here we are taking the example of Account object to set scoping Rule. Using we way we can set the scoping rule for all object.

Step to set scoping rule for Account object:

- Go to setup-up click on object manager and search for account object. now click on this and open it.
- After that click on scoping rule from left hand side menu.



- After the click on scoping rule and click on Create new Rule button.

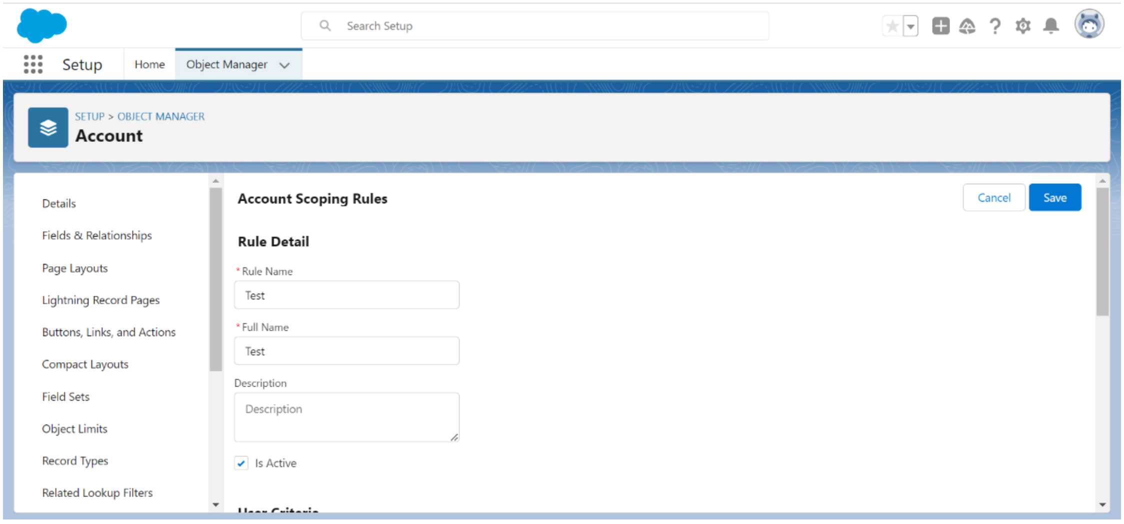


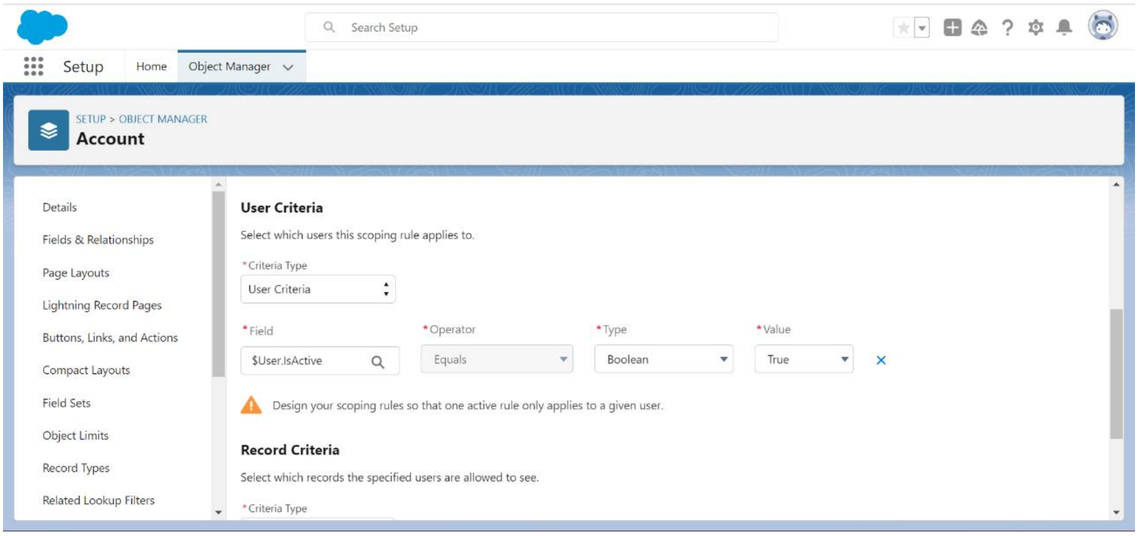
- After that new screen will open in which we got 3 section Rule Details, user criteria, and record criteria.

I. In Rule details section, we have to enter Rule name, full name, description, and a check box for **Is Active** this check box should be checked if we want to active and if unchecked so its de-activate.

II. In user criteria, we have 2 option user criteria and permission criteria. we have to choose criteria type as **user criteria** and the field name from the list we can choose any field. Then need to choose **operator**, **Type** and **value** based on requirement. Here we are choosing Active, operators as **Equal**, type **Boolean**, and value is **True**.

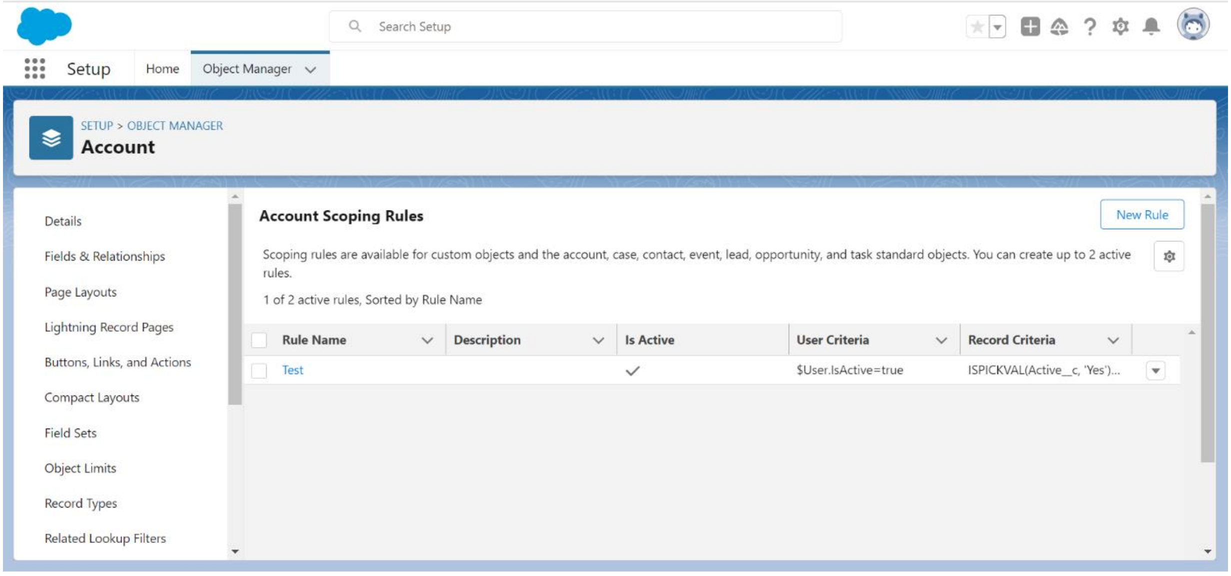
III. Next is record criteria, choose criteria type is **Record Field**, next choose any field from that object in which we want to add criteria, then operators, type, and value. In Type we have 2 option **picklist and field reference**. Here we are choosing **Active** in Field, Type is **picklist** and value is **Yes**.



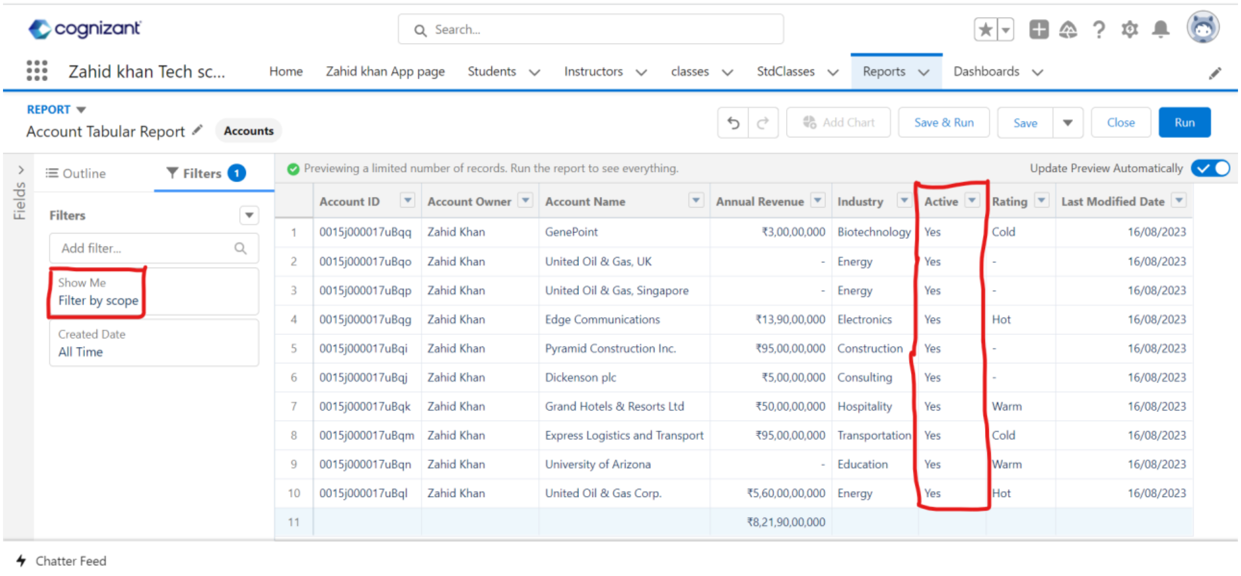


- Now click on save.

- Now scoping rule is created, if that rule will match then this record will show in filter.



- Now go to account report and select the filter by scope option from standard filter. Then only Active Yes field will be visible in report.

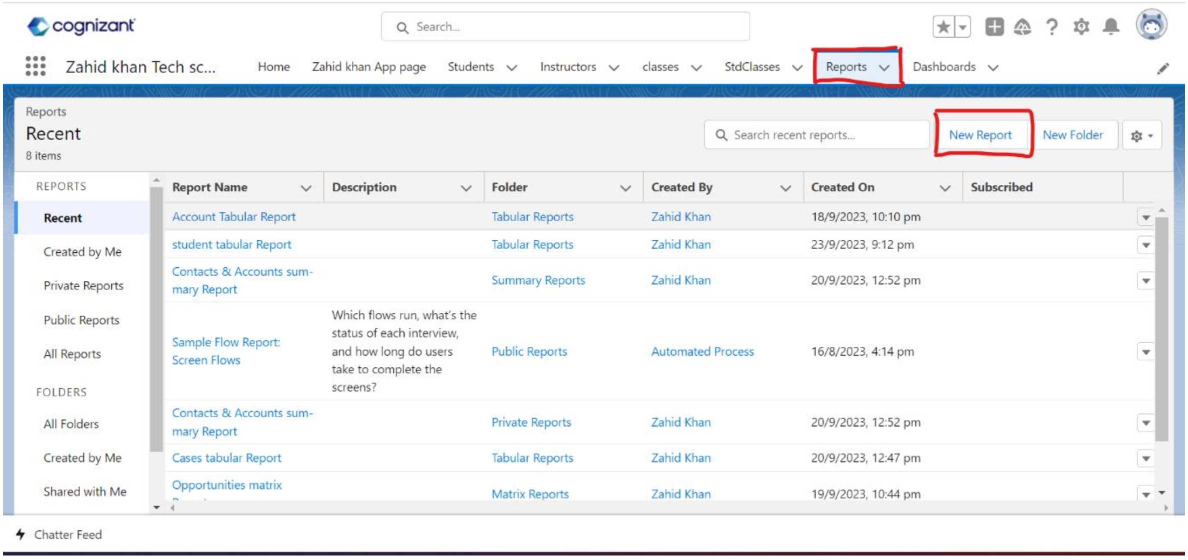


Joined Report

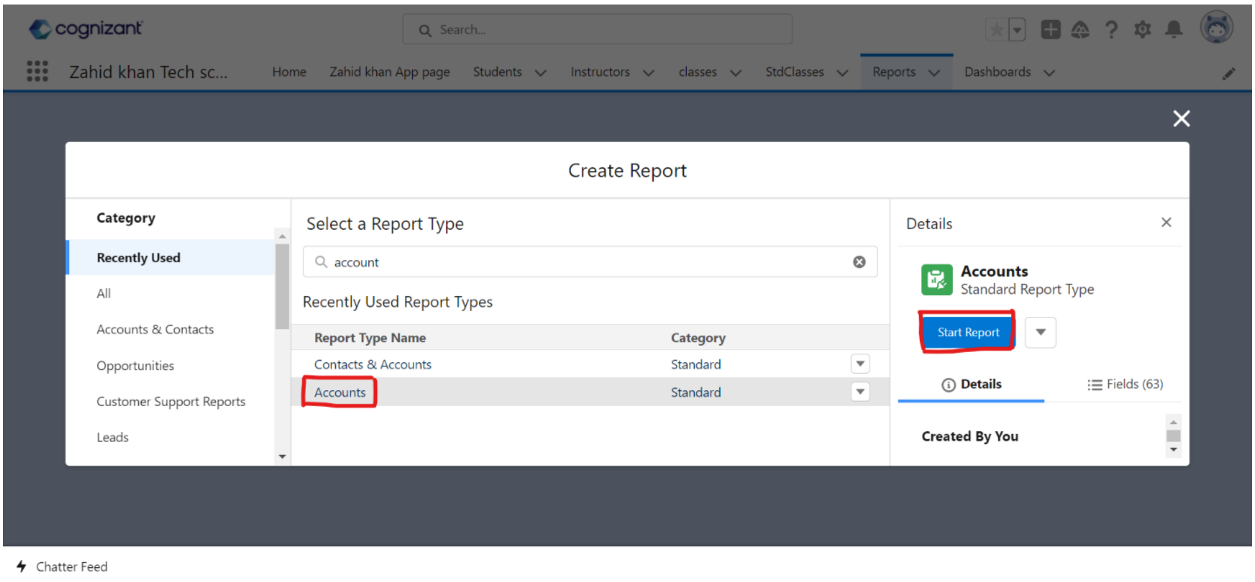
- This is 4th type of report.

Steps to create Joined Report:

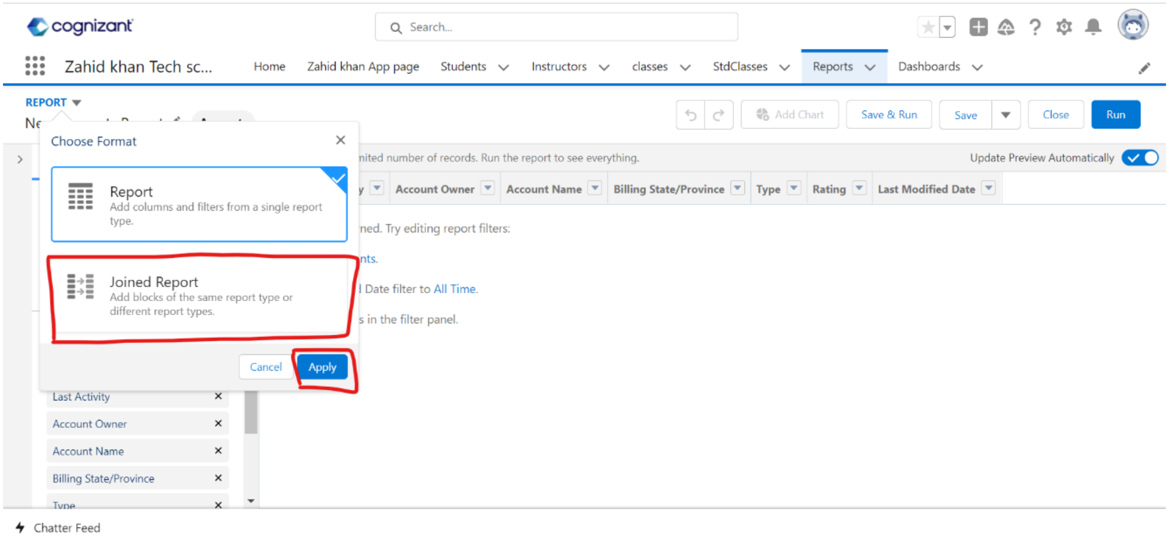
- Go to report tab on front-end and click on report, after that click on new Report.



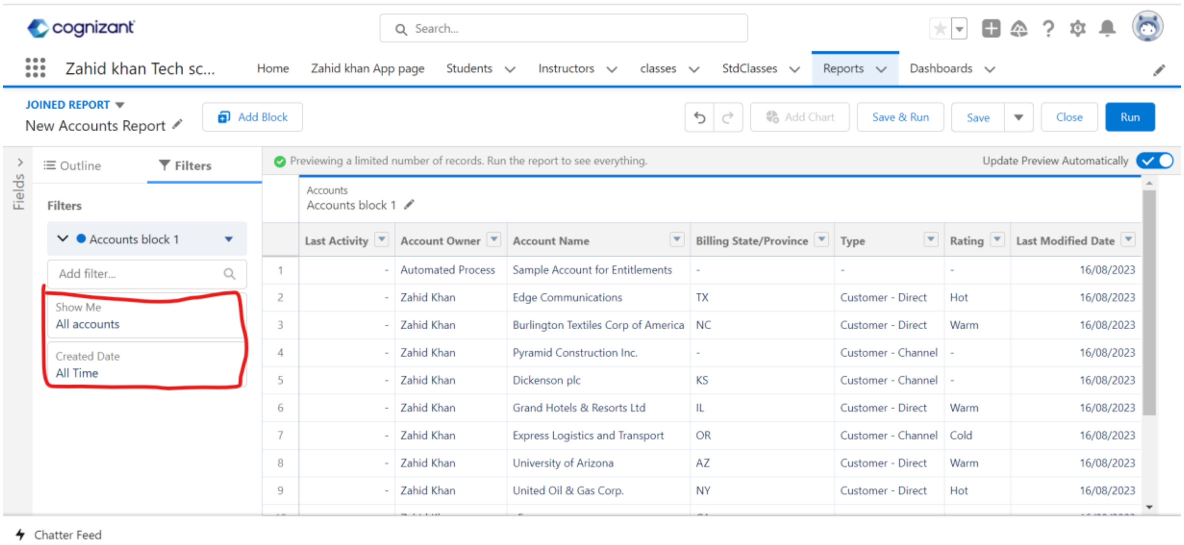
- After that select Report types, here we are choosing standard object(account). We can make joined report for custom object as well. From custom object report we have to make report type first using above steps.
- After that click on start Report.



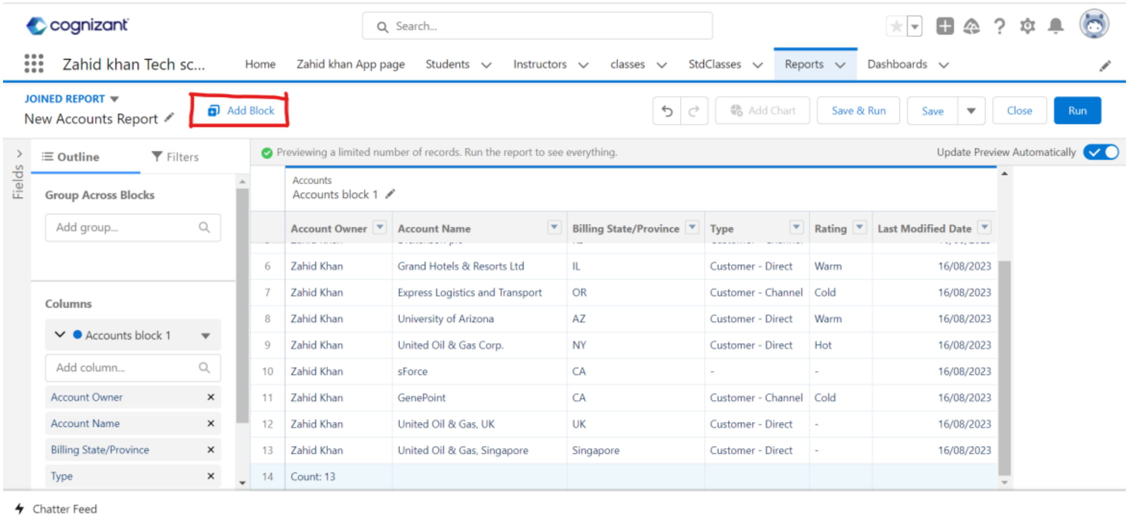
- Now we can see a Report option on top of the screen just click on that and select joined report option. And click on apply. Report option is used to make tabular, summary and matrix reports.



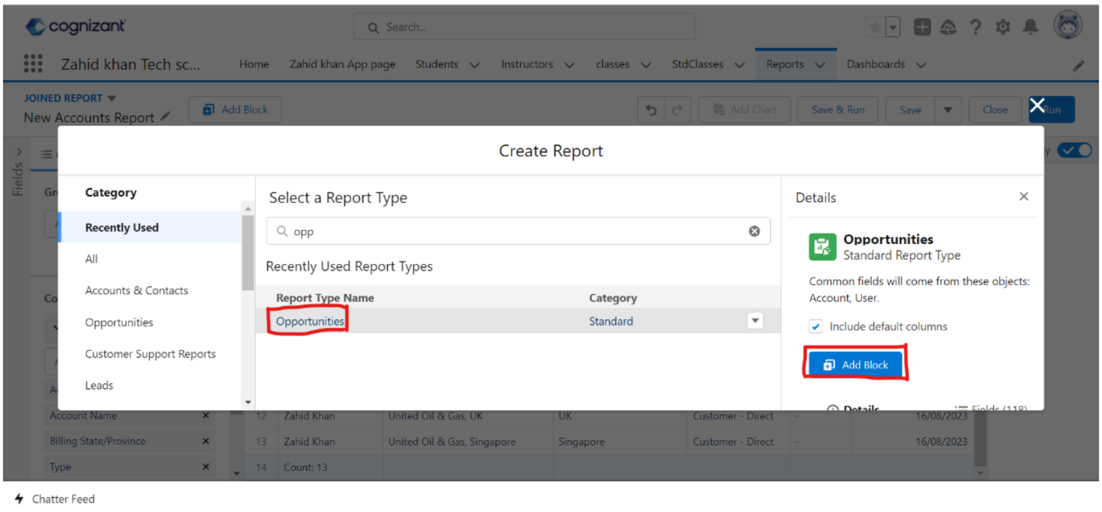
- Now go to filter and apply standard filter. Select show me All account to show all records and created date All time.



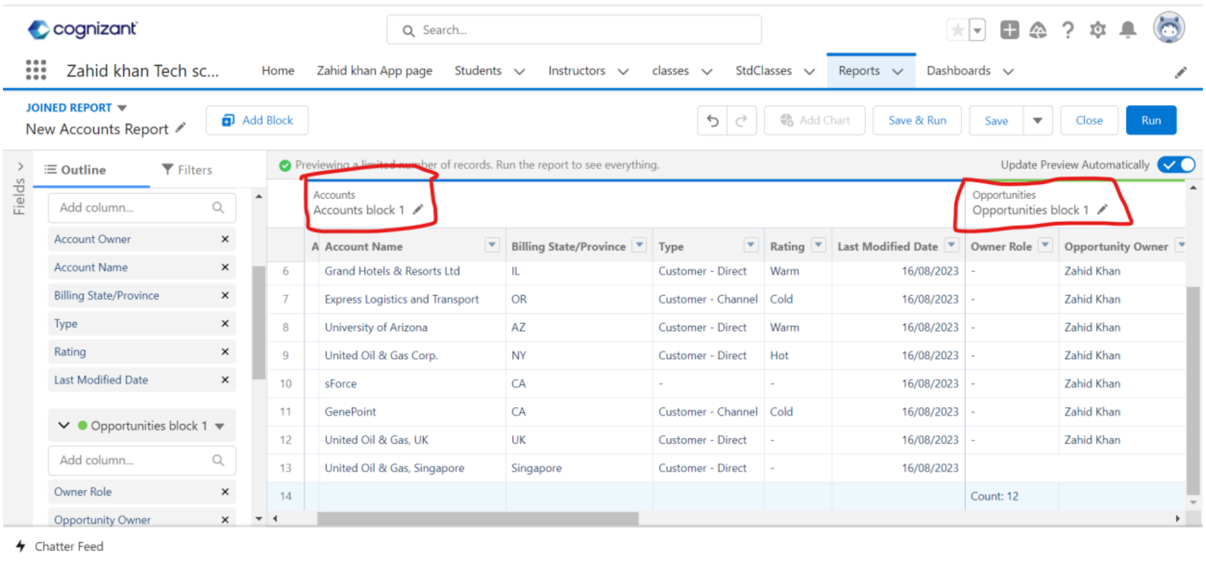
- We can apply all types of filters same as another types of report.
- Now click on **Add Block** button beside report name so that we can add another report types. i.e., Opportunities record type.



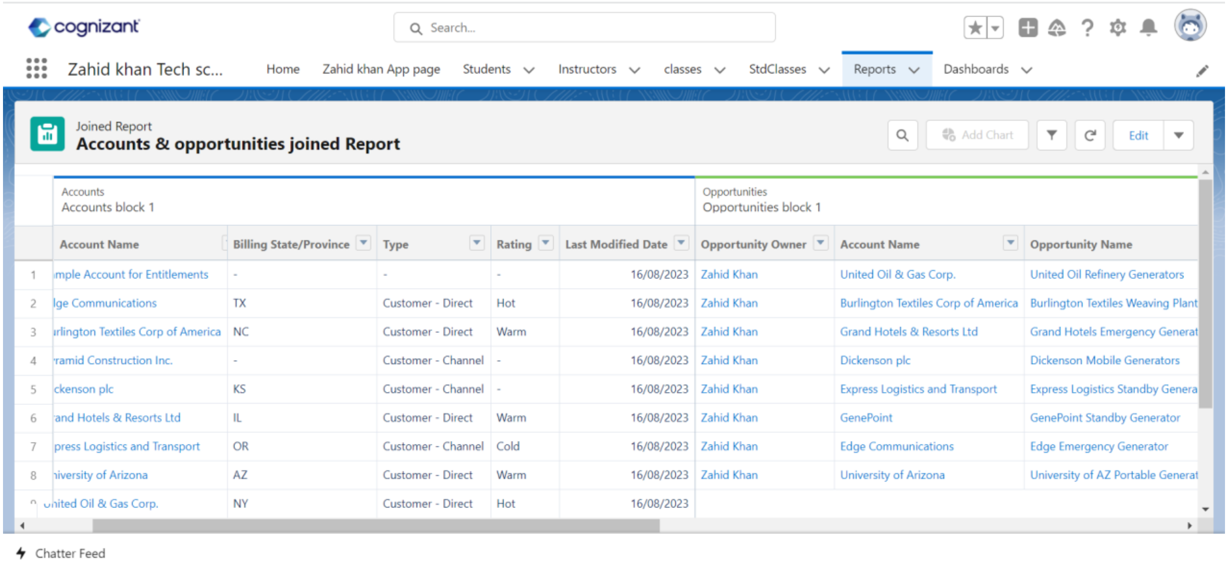
- now enter another Report type (i.e., opportunities). And click on Add block.



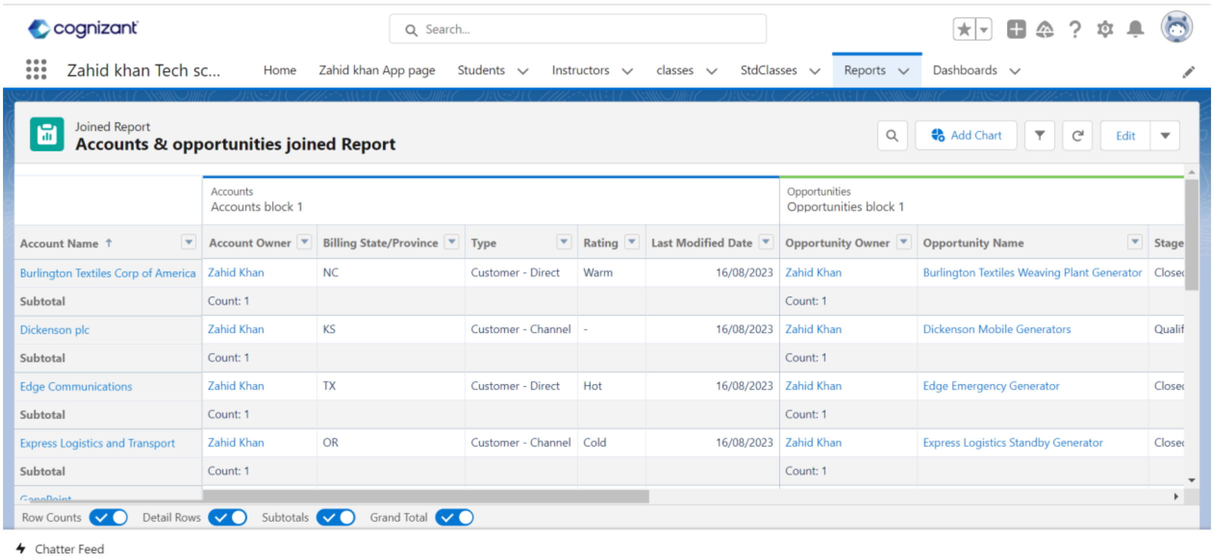
- Now we can see both reports on report page.



- We can apply standard, custom and logic filter on both report types (i.e., account & opportunities).
- Now save the report in joined folder by making it and run the report. We can see the report as shown below.



- We can also make Summary report for both the Report types. For example: we are making summary report by **account name**. as shown in below image we can see the summary report for both Report types.



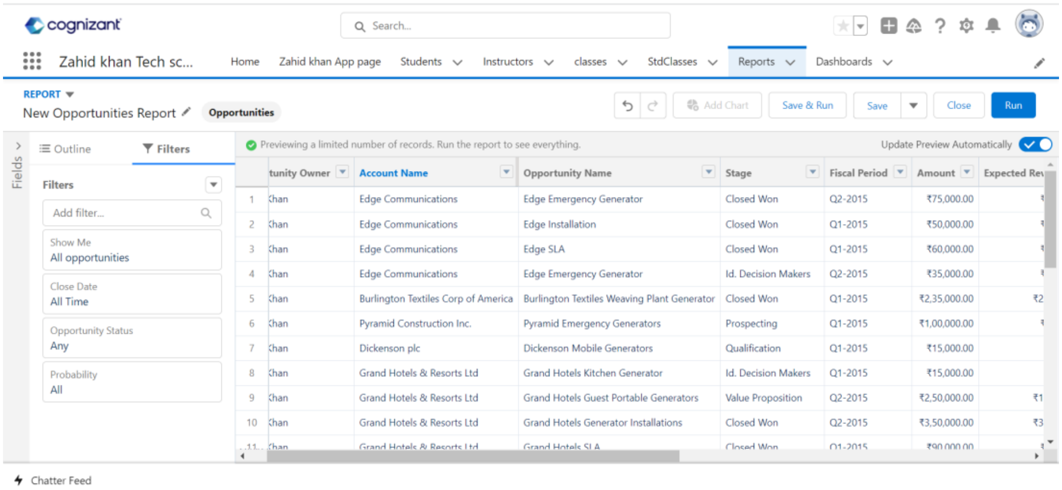
- We can the report with those blocks which has some common fields.
- We can also Add chart after making summary report with joined report.

Bucket field

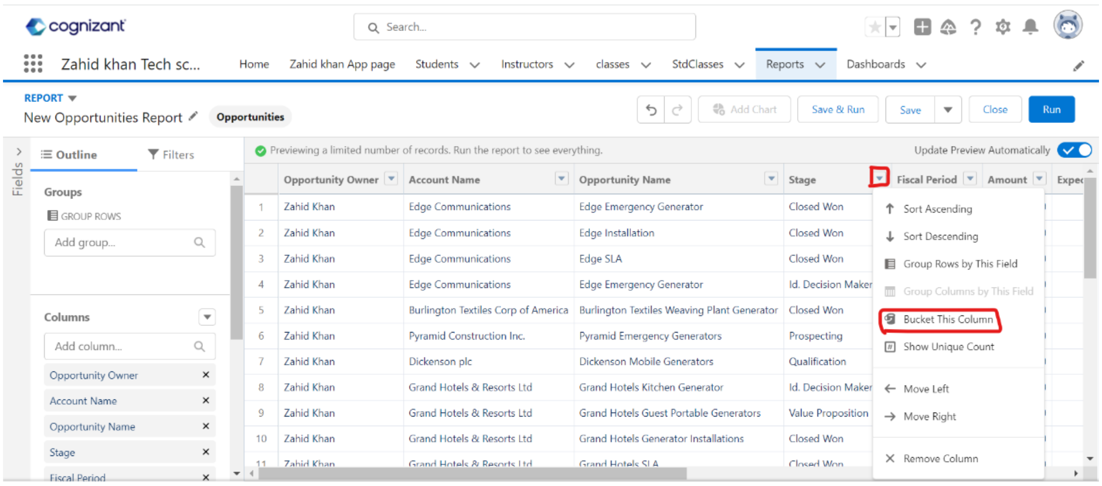
- Bucket field is used to grouping the report based on records on report.
- For example, in opportunities report there are 2 common records **closed won** and **closed lost** in stage column. if in opportunities **closed won** and **closed lost** are open so they grouped together and if the opportunities other than closed won and closed lost, so they grouped together.
- Its mean we have to create 2 bucket field 1 for closed won and closed lost and 2nd for open. If this like requirement, then we have to create bucket field.

Steps to create bucket field(picklist):

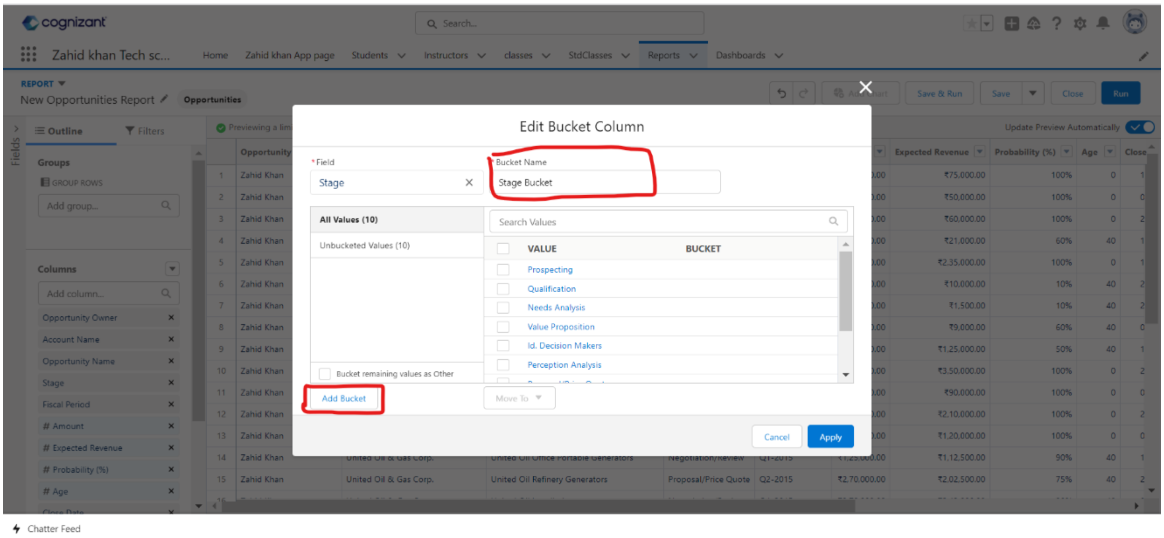
- 1st make a report on that object in which we want to make bucket field. For example, we are making report on opportunities.



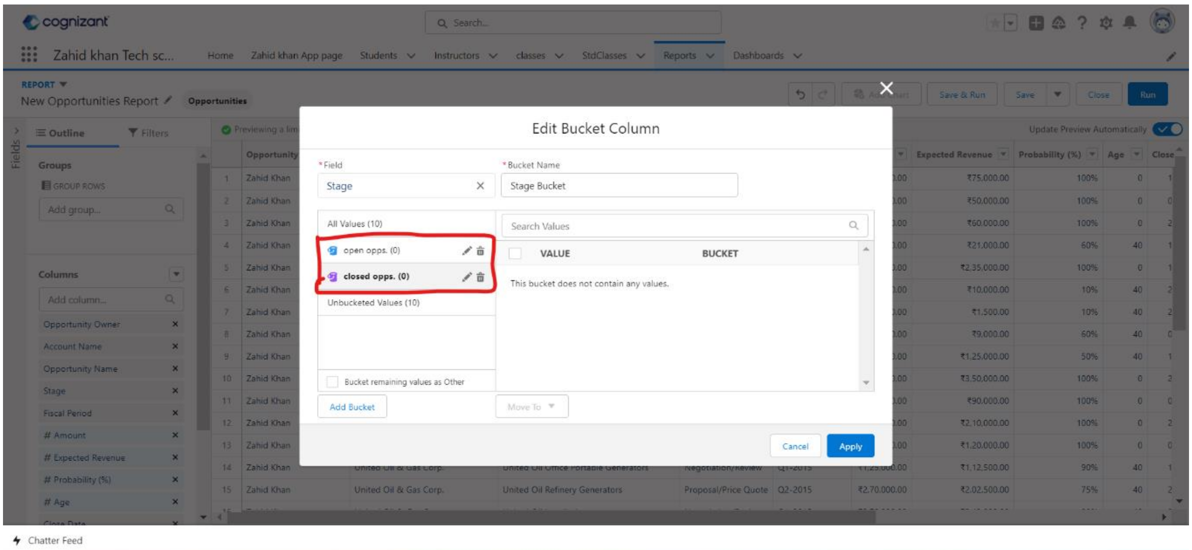
- Now our requirement is that make bucket field for stage column based on closed won and close lost.
- click on drop down arrow with the stage column and click on bucket this column.



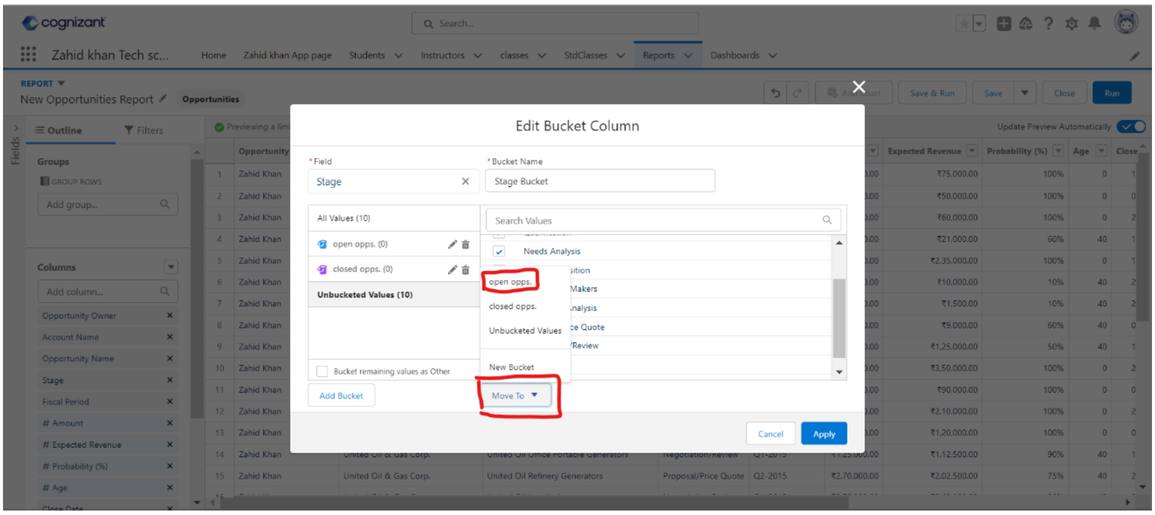
- After that enter the bucket name. after that click on Add bucket.



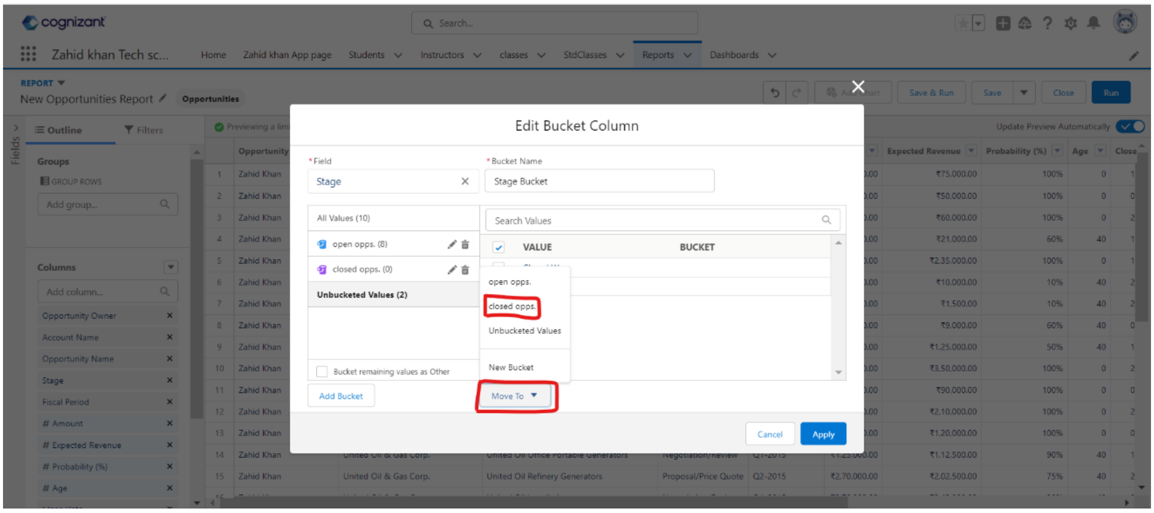
- Make 2 bucket one for open opps, one for closed won and closed lost named as closed Opps.



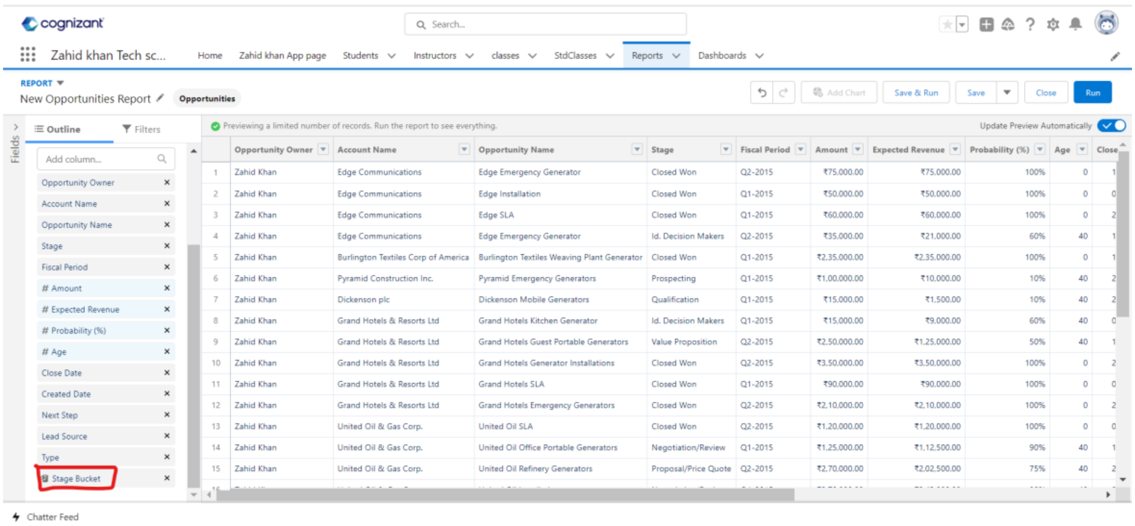
- now click on unchecked value and move only closed won and closed lost to Closed Opps. Bucket and other should be move to open Opps.
- To move the All field except closed won and closed lost to open Opps. Click on unchecked value after that check all the field which we want to move and click on **Move To** button on bottom and choose the Open Opps. Folder in so that all field will move to open Opps.



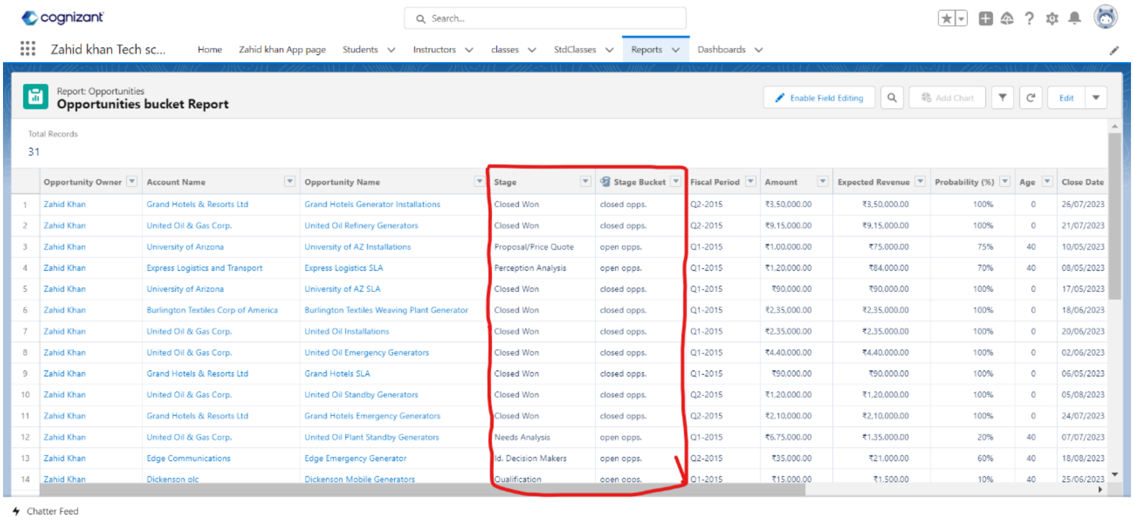
- Same way moves closed won and closed lost to close Opps.



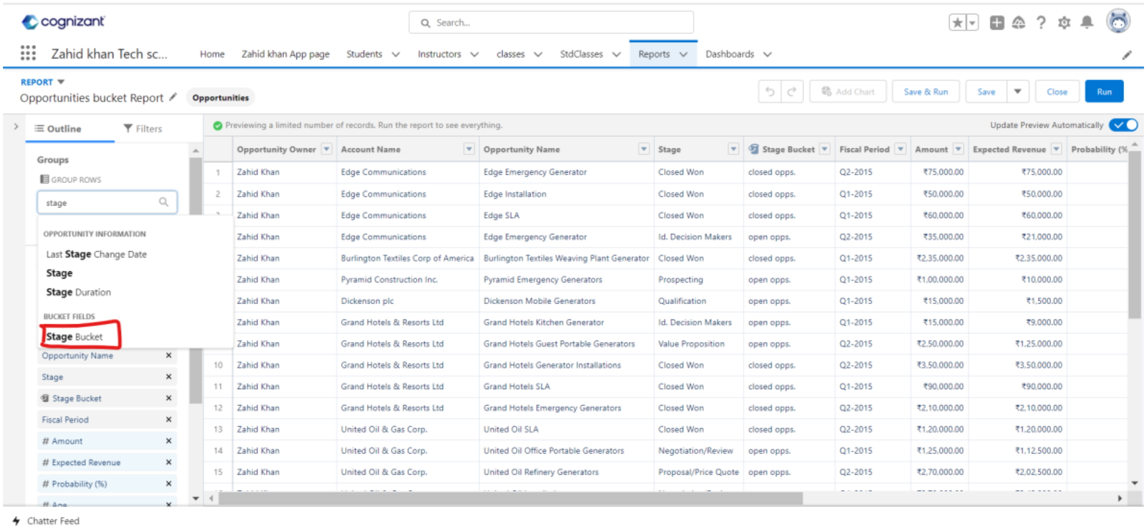
- After that click on apply.
- Now we will see a stage Bucket column name bucket at the end of the Reports.



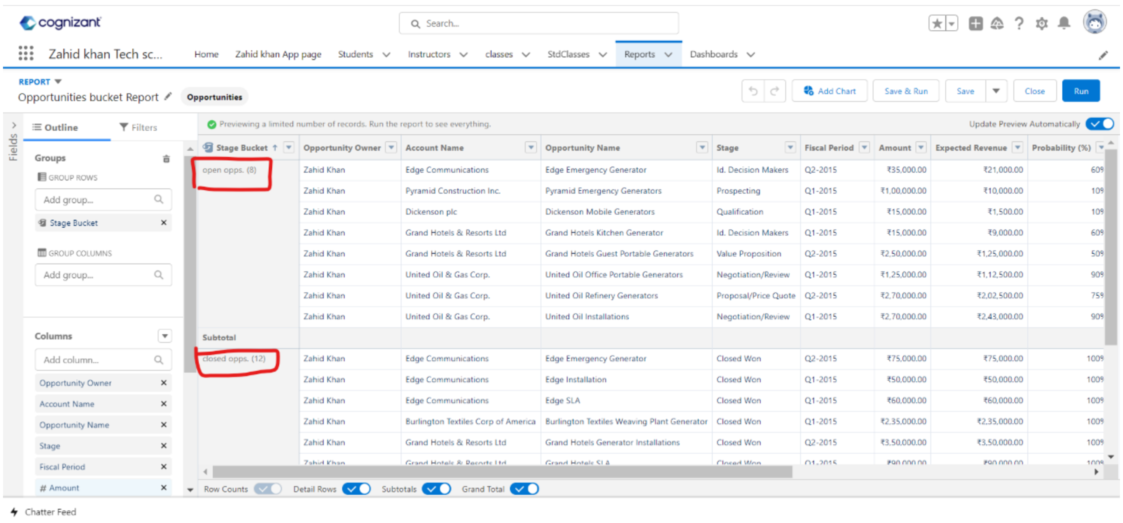
- Now we will see only from stage closed won and closed lost in closed Opps. Bucket and all others field from stage shown in open Opps.



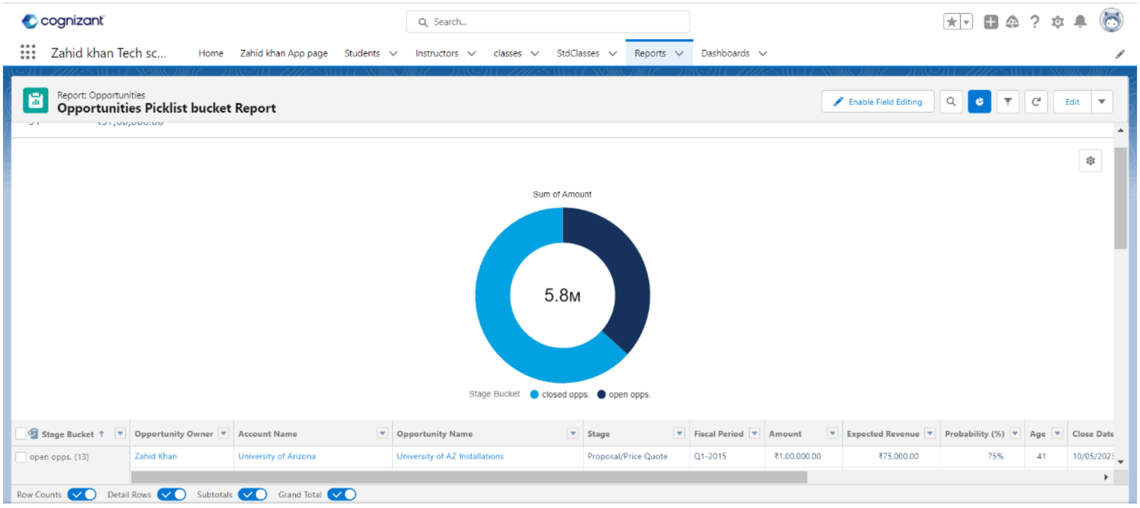
- Now we will use this **Stage Bucket** field for group. Click on Group row inside Outline left hand side bar. And search for **Stage Bucket**.



- After clicking on stage bucket grouping will be done on the basis of this bucket.



- Like this we can create custom grouping field and create summary report. We can also add chart to this report by clicking on Add chart.

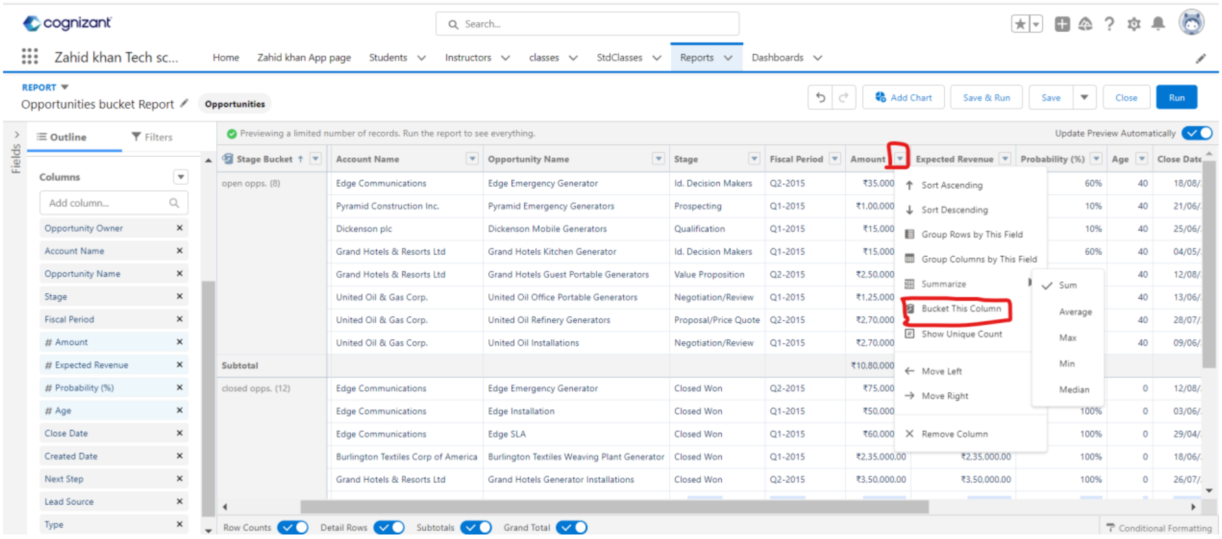


Bucket filed for numerical value:

- We can create bucket filed for numerical value and picklist. Before we see how to create for picklist now, we will see how to create bucket field for numerical value.
- We are creating bucket field for amount column and create 3 bucket 1^{st}- 0 to 50000, 2^{nd} – 50001 to 100000 and 3^{rd} <100000.

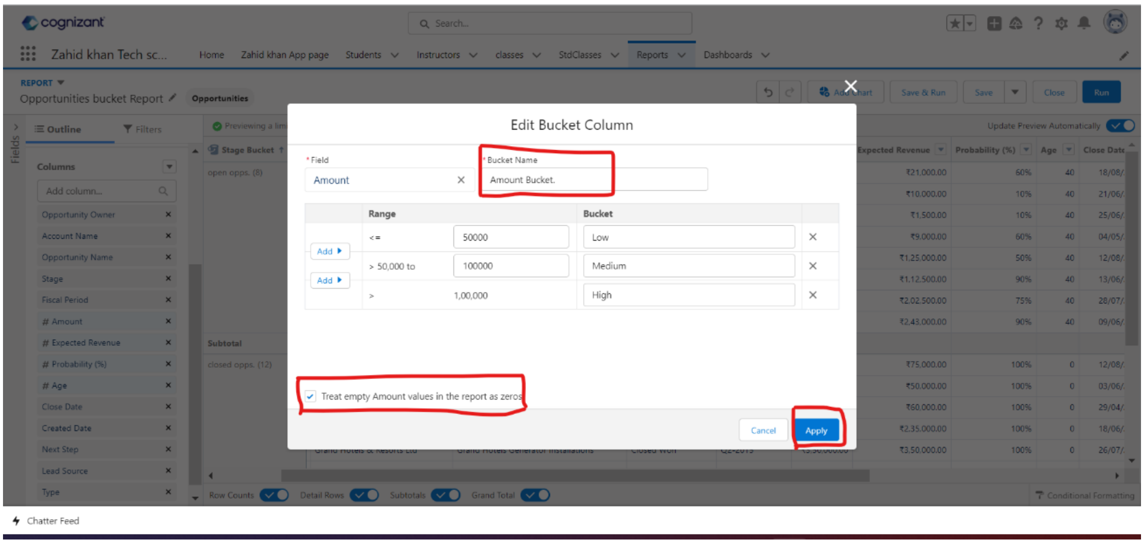
Steps to create bucket field (for numerical value):

- Go to same summary report for opportunities and click on **Amount** column. After that click on the drop arrow with Amount column and click on **bucket this column**.

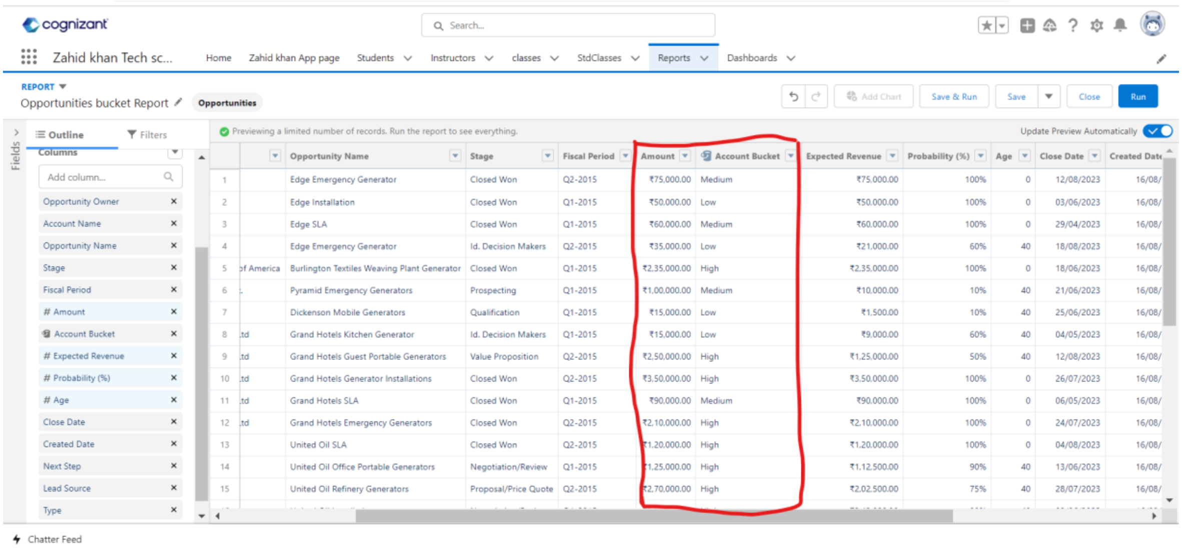


- Now enter the bucket name. for example, name the bucket as amount bucket. Name of the bucket depends on the project requirement.

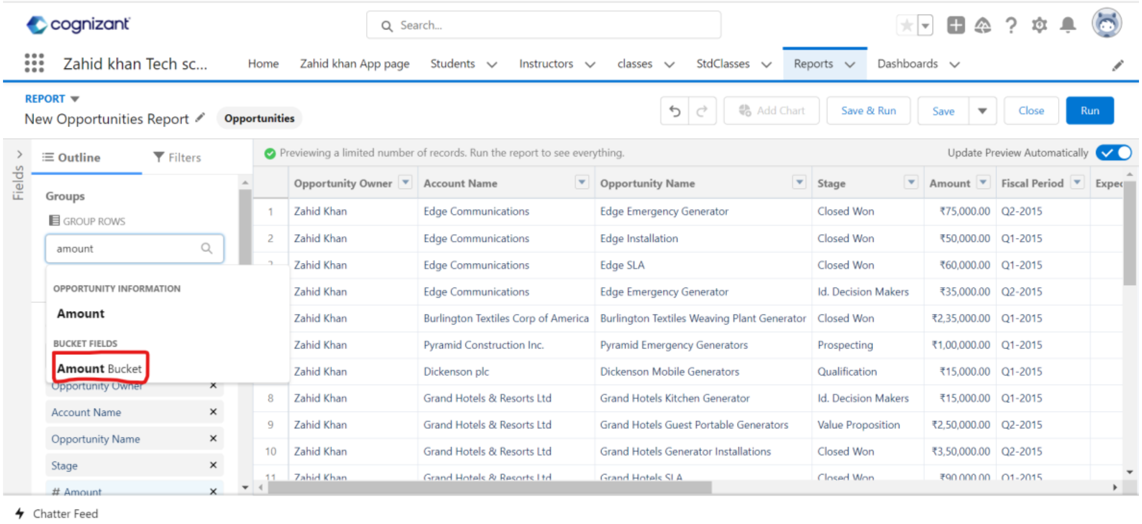
- After that enter the 1st amount which is 0 to 50000 so its should be =>50000 and enter the bucket name as Low.
- Again enter 2nd amount which is 50000 to 100000 so it's written as >50000 to 100000 and enter bucket name as medium.
- Again enter 3rd amount which is >100000 so it's written as > 100000 and enter bucket name as high.
- And check the box that treats Empty column as Zero. After that click on apply.



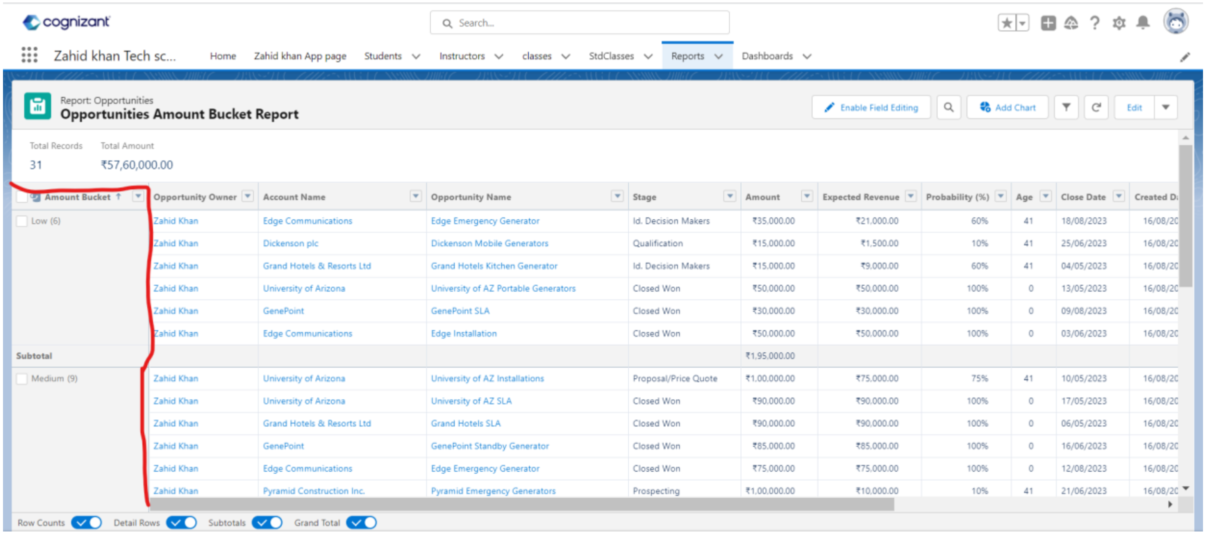
- Now we will see that **Account bucket** is created.



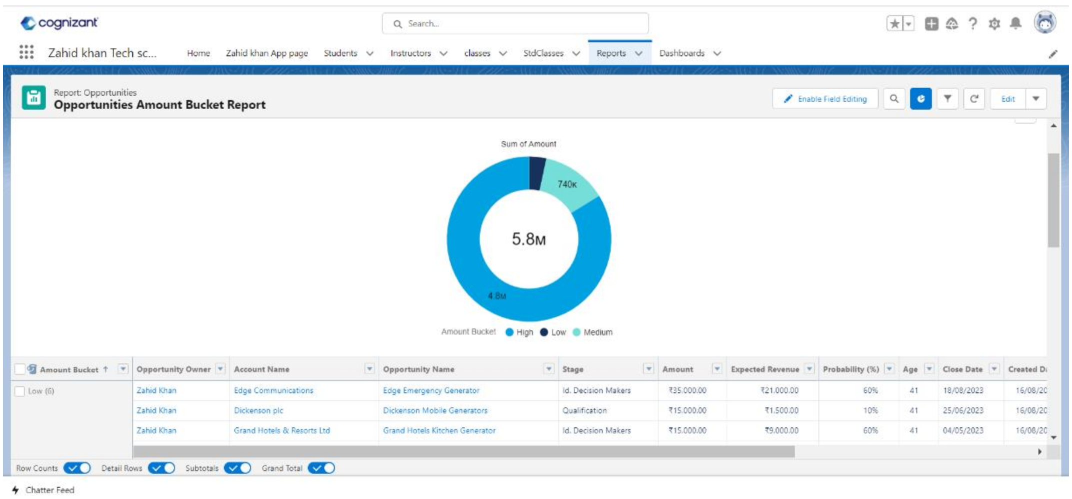
- Now we will use this **Account Bucket** field for grouping. Click on Group rows inside Outline left hand side bar. And search for **Account Bucket**



- now we will see that Report is summarized based on **Amount Bucket**. Low, Medium, High.



- We can also add Chart.

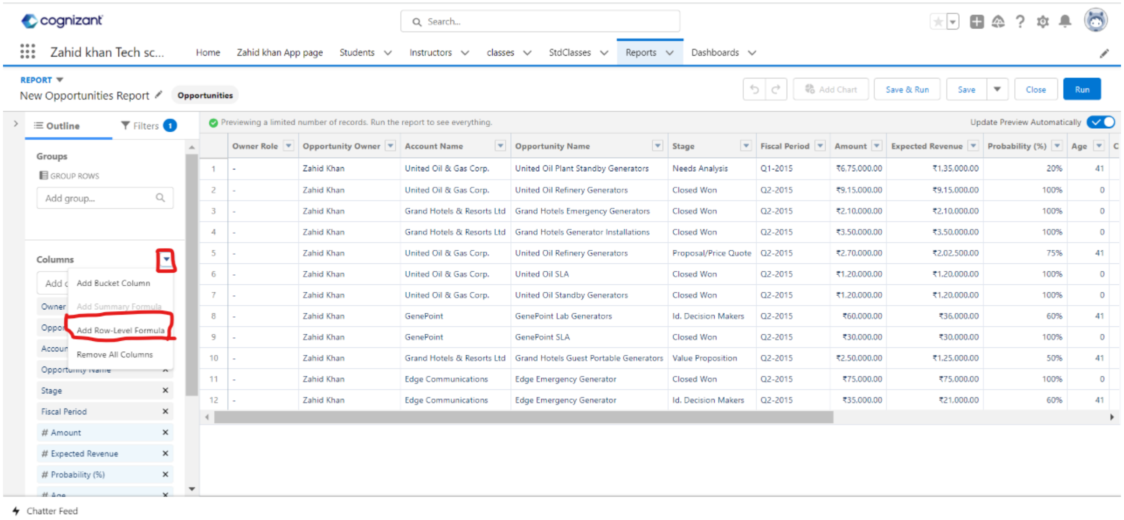


Row-level Formula

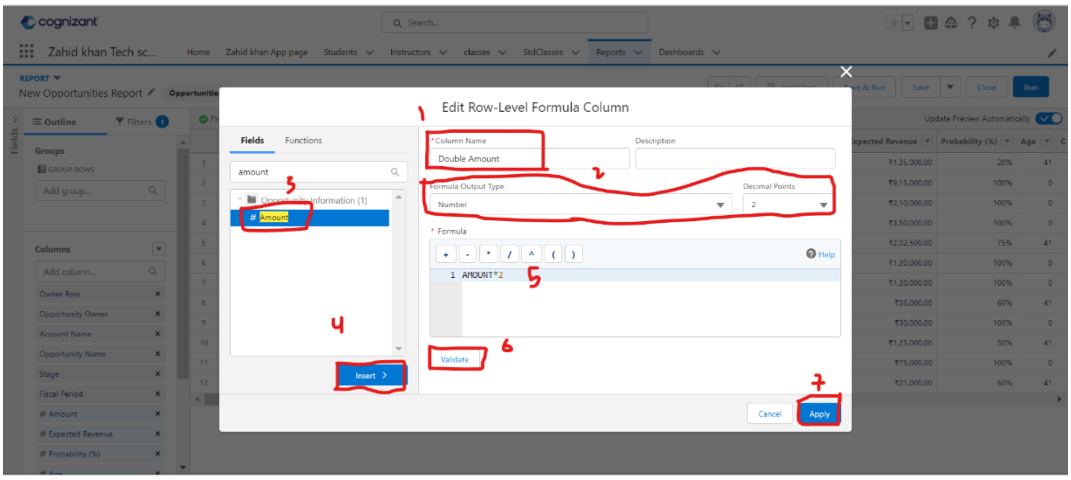
- Row-level Formula is similar to Formula Field.
- row-level Formula and bucket field only available in Report. It would be available under actual Object. Its for reporting purpose only.

Steps to create Row-level Formula in report:

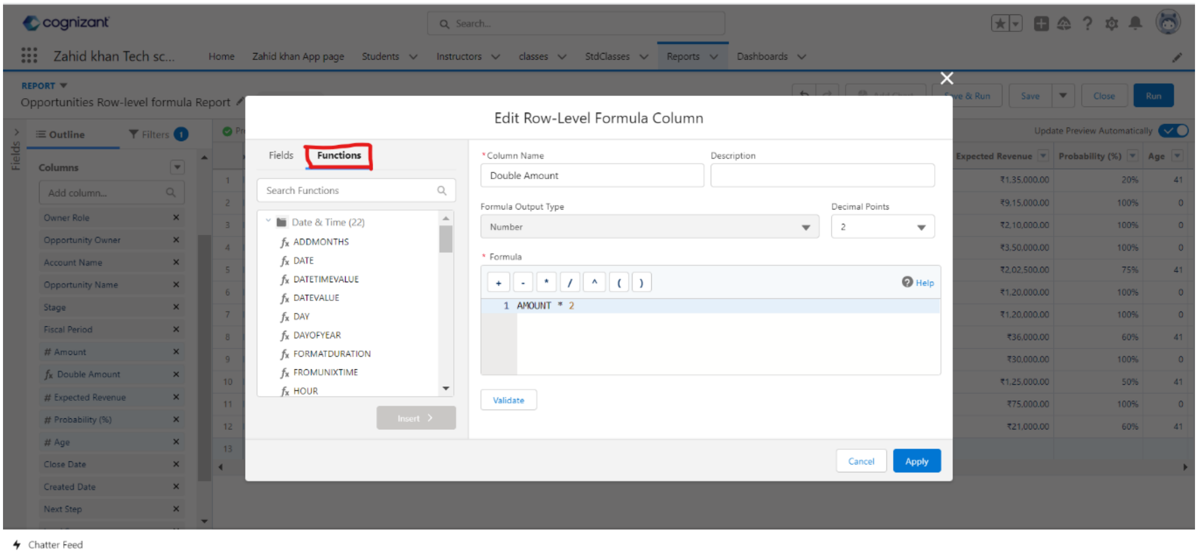
- create a new Report on opportunities. Save the report in a folder.
- Now for Apply the Row-level Formula click on drop-down arrow beside the columns on left hand side menu. And click on **Add Row-level Formula**.



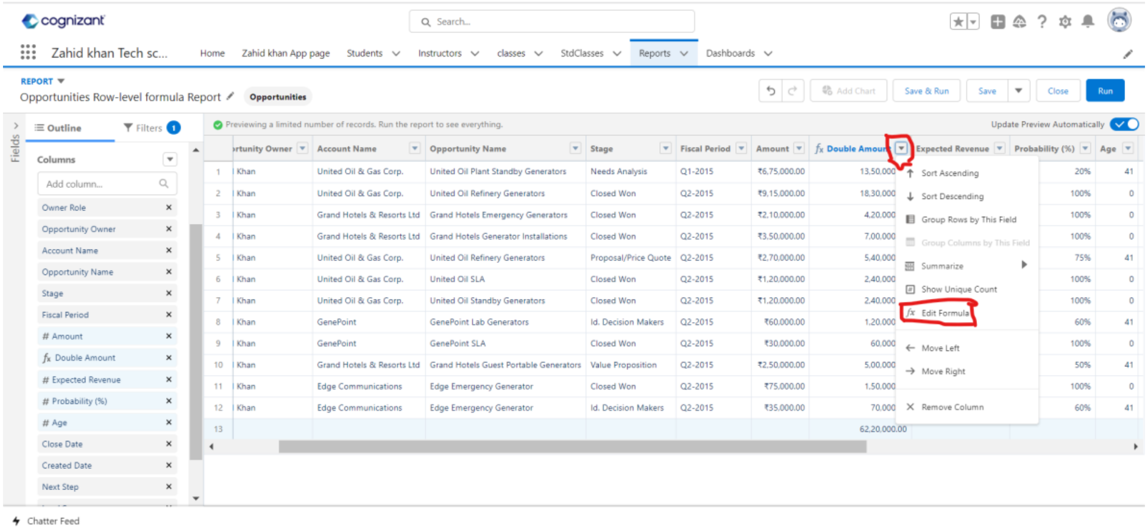
- After that new pop-up will open, we have to enter the name of the column, description, Formula output type (in which we got 4 options number, text, date/time, date). And decimals.
- After that we have to Add the formula by inserting the field. For example, we are going to multiply the Amount with 2. So, for this select Field (Amount) from Search filed option and insert it and multiply it with 2.
- After that click on validate and click on Apply.



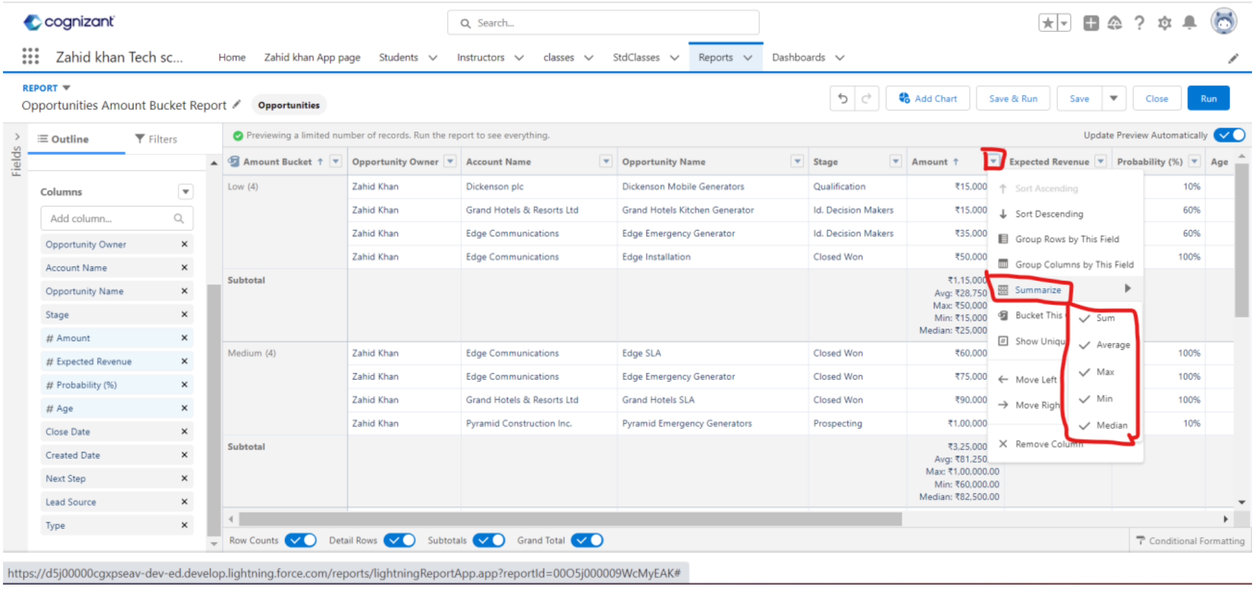
- We can also apply Function to the formula.



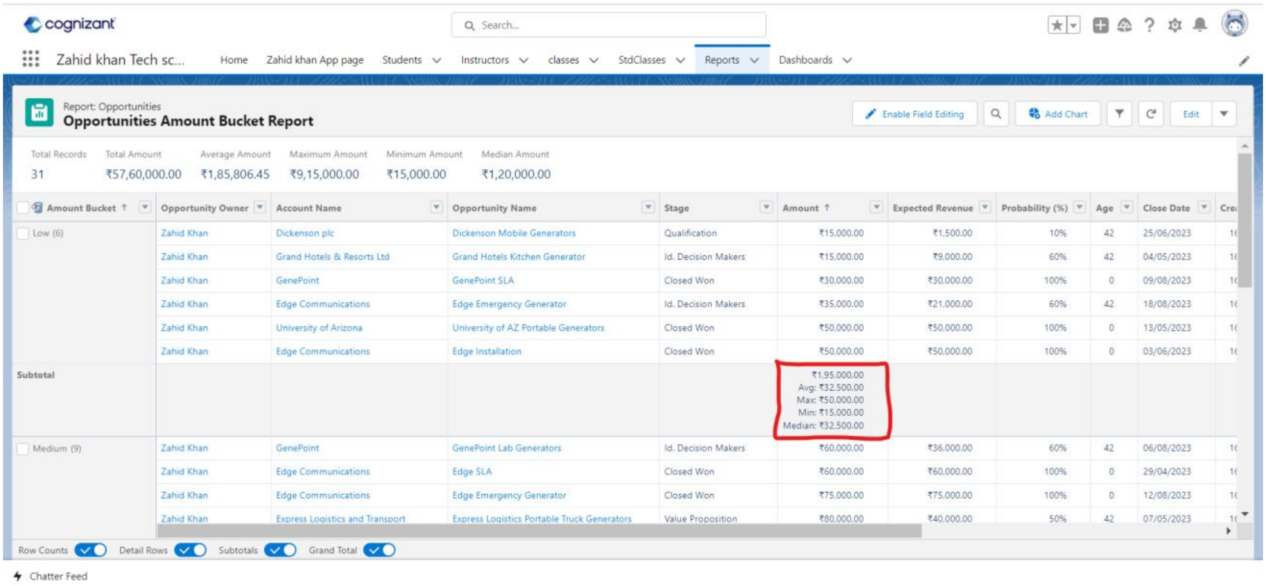
- If we want to edit the formula field, then just click on drop-down arrow beside the created row-level formula and click on edit.



- we can also calculate average, max, min, median of any numerical value. For example, we will calculate all these for amount column.
- To do so click on the drop drown Arrow beside the Amount column and click on summarize after that click on the Arrow we will find option for average, sum, max, min, median.



- After applying this and save the report and click on Run.



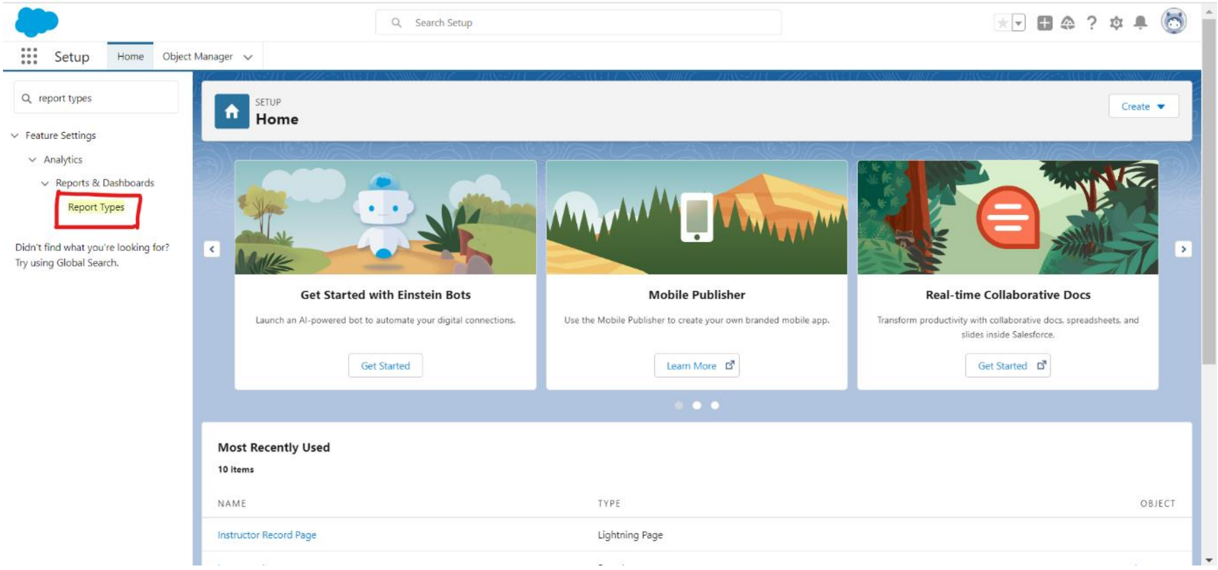
Day-10

Reports on Duplicate Records

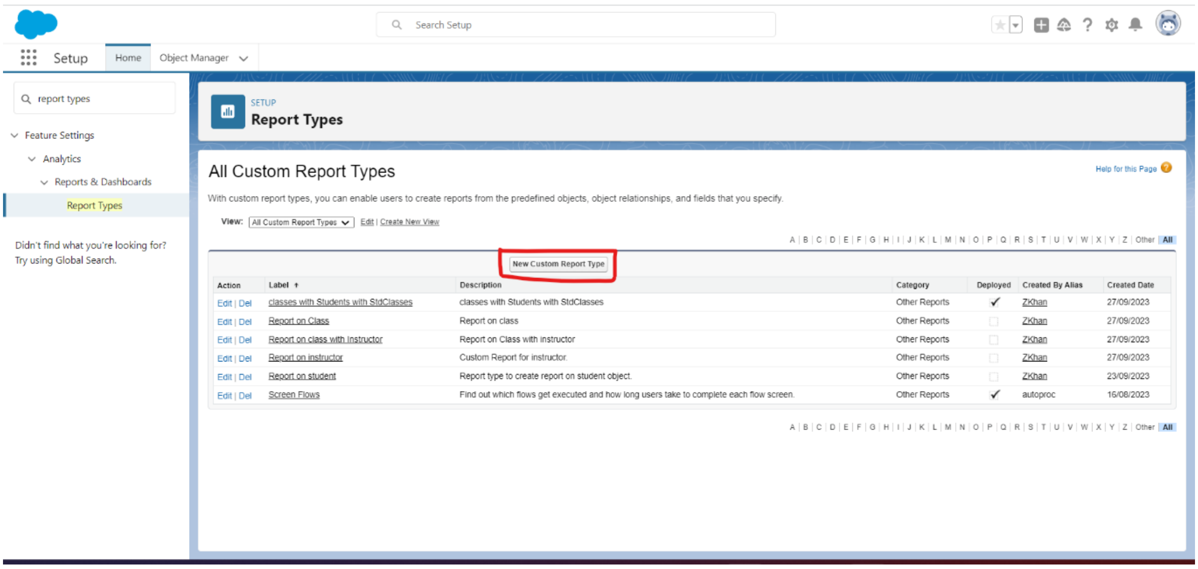
- If there are any duplicate records in our org so it will be visible in duplication records.

Steps to create Reports on duplication:

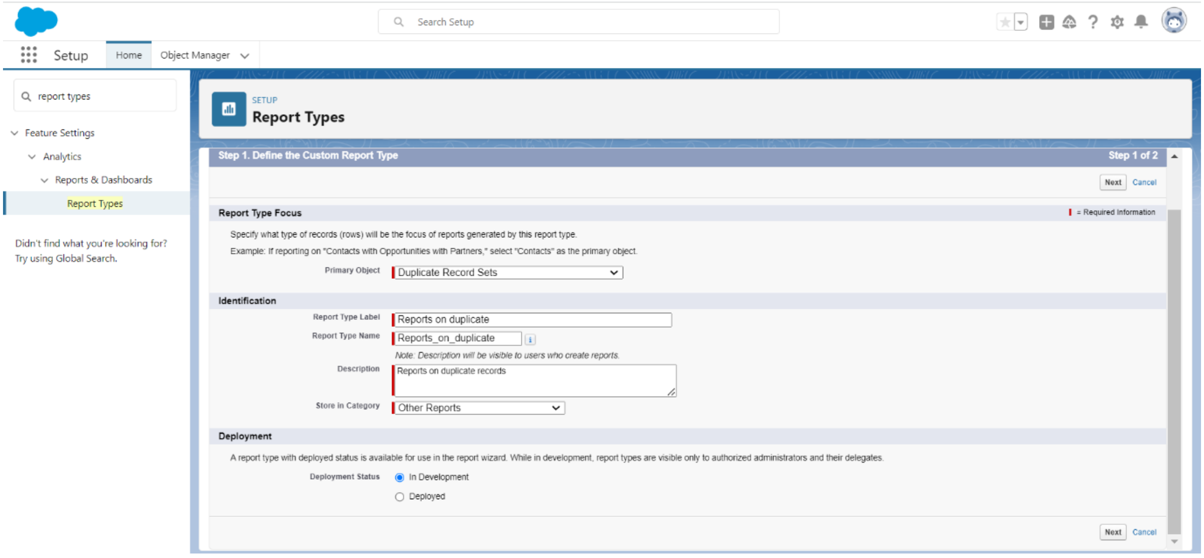
- Go to the set-up and click on Home.
- After that search for **Report Types** in Quick search.



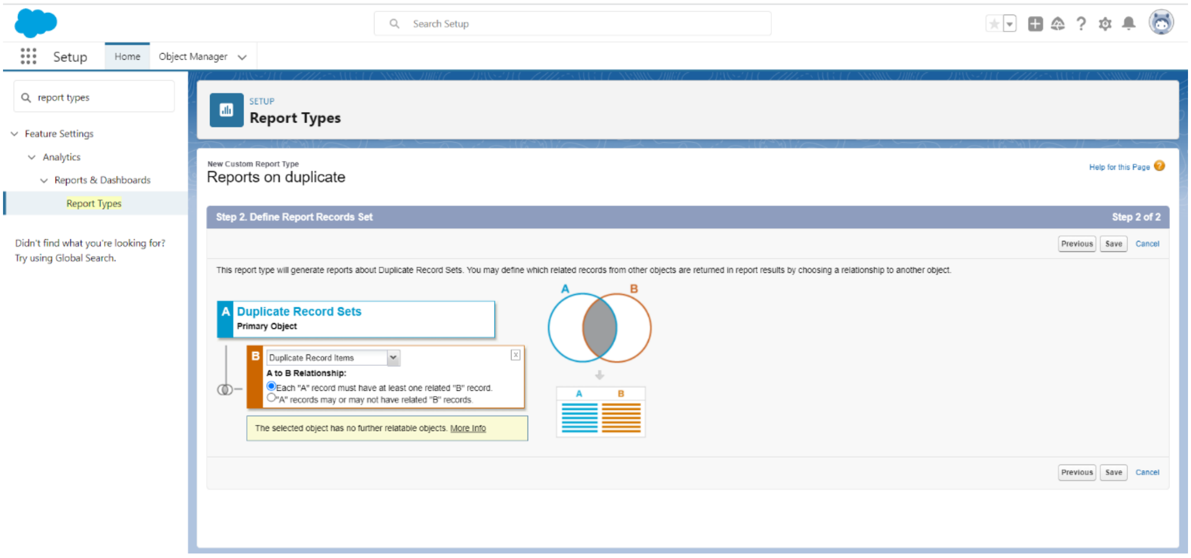
- Now click on Report Types. After that click on **New custom Report Type**.



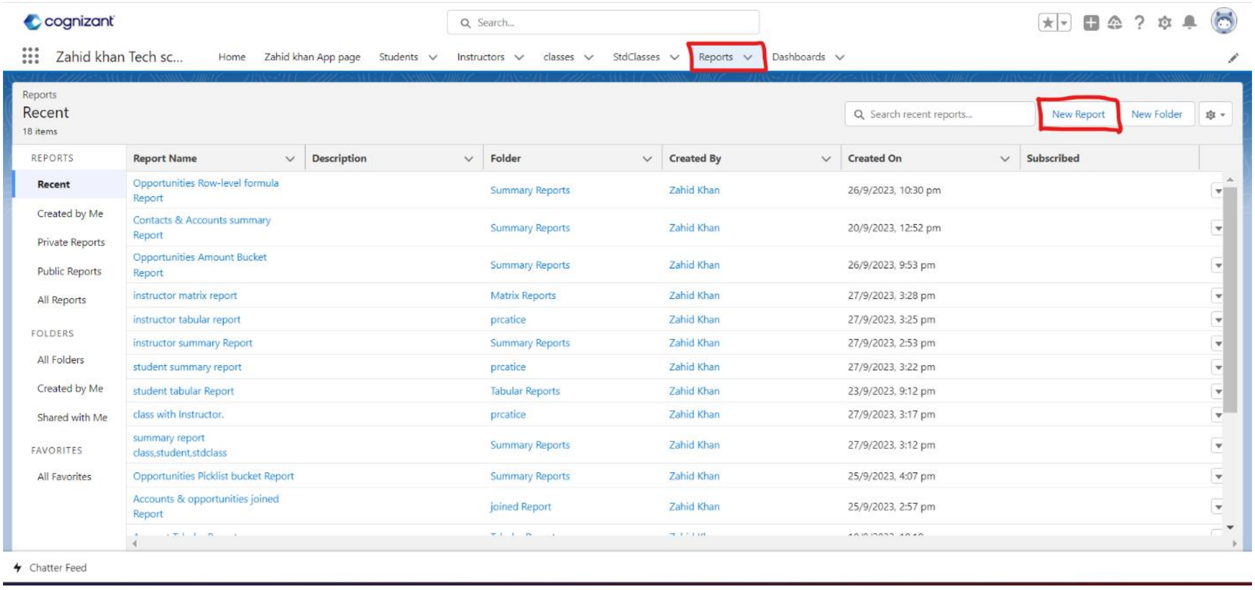
- After that select **Duplicate report sets** in primary object. Enter report type label, description, select other records in store in category. Select **In development** in deployment status.
- After that click on next.



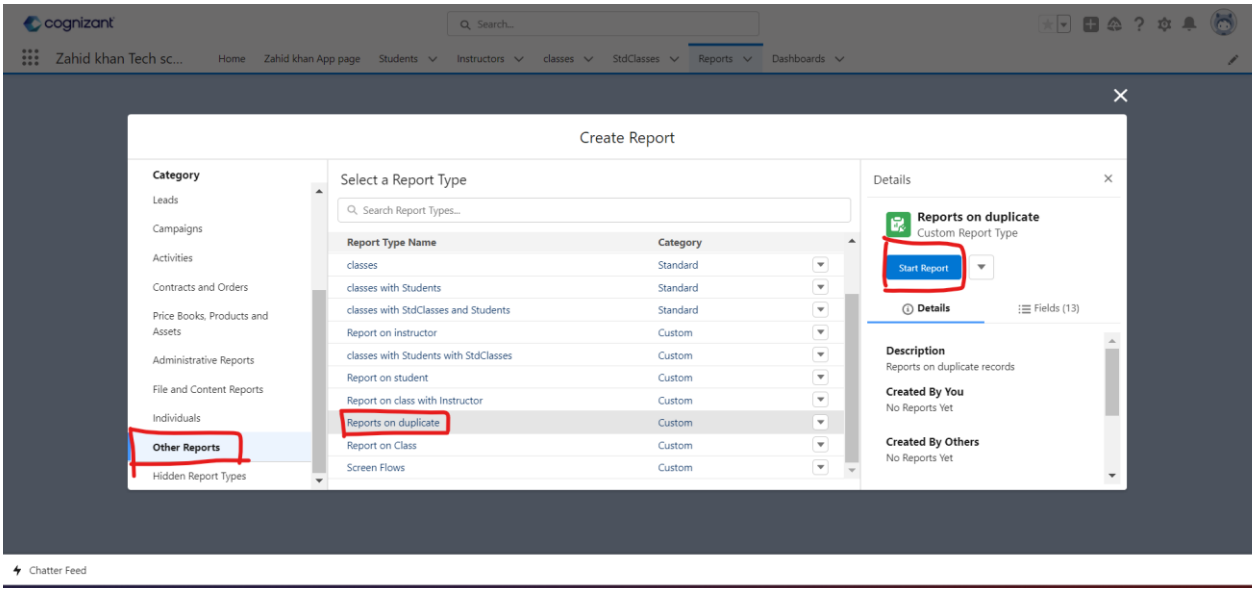
- After that select **Duplicate records items** in B and select **Each A record must have at least one related B record**. And click on save.



- Now go to Front-end of the App and click on **Report** Tab. After that click on **New Report** to create a Report.



- After that click on **other reports** and select Reports on duplicate which we make in Report types section and click on **start Report** button.



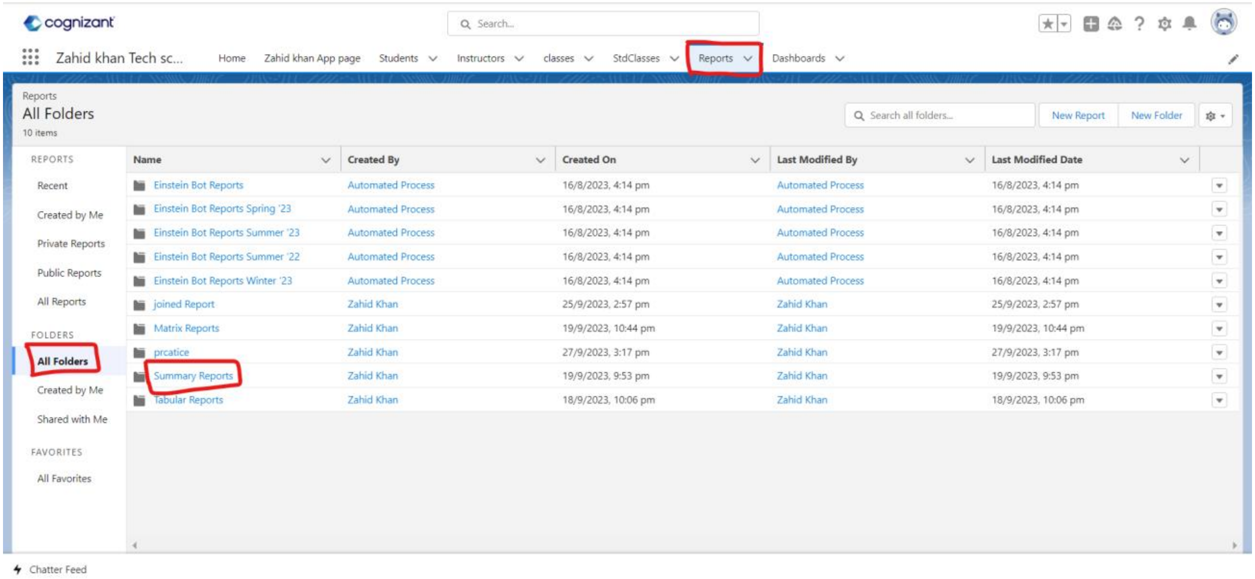
- If there are any duplicate report in our org so it will show in these reports.
- We can create tabular, summary, matrix reports on duplication records in org. we can also apply chart for this report.

Export Reports

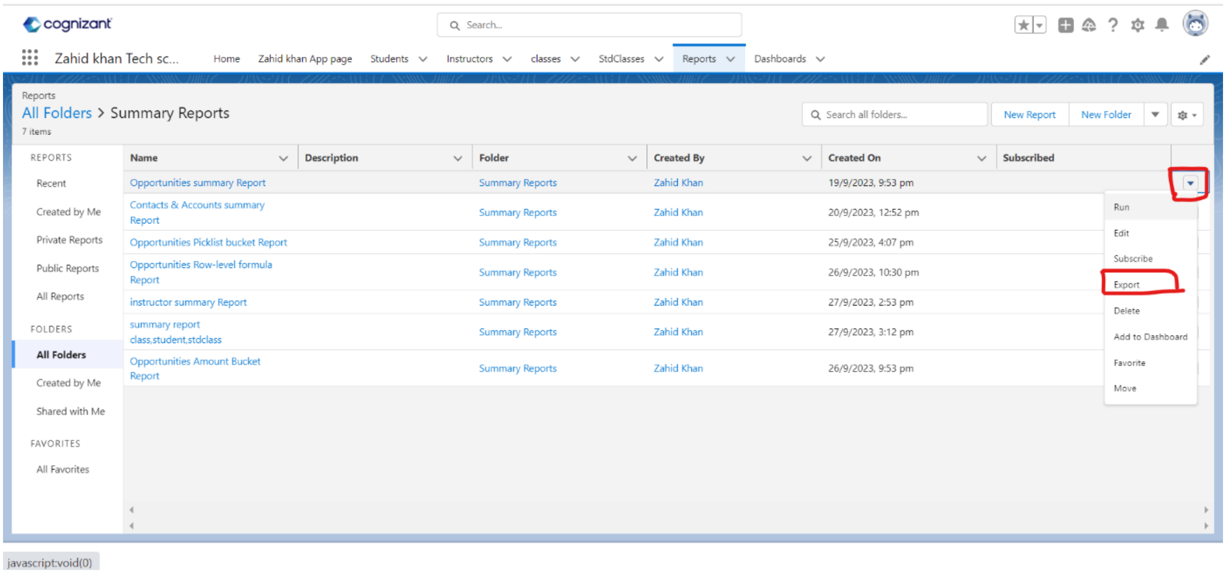
- What ever Report we created will export or download these reports in our local system.

Steps to Export Reports in Local system:

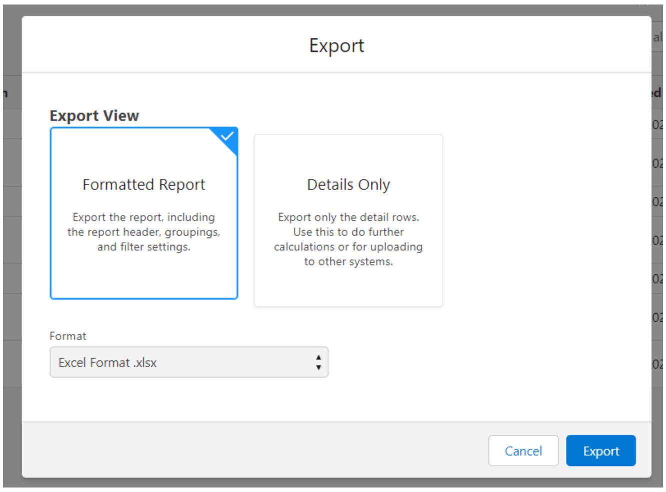
- To export any report, click on Report tab in Front-end. After that click on All folder and select the folder of the report which contain the report and after that select the report which we want to export in our system.
- For example, we are selecting summary of the Account. For this we have to go to summary report folder.

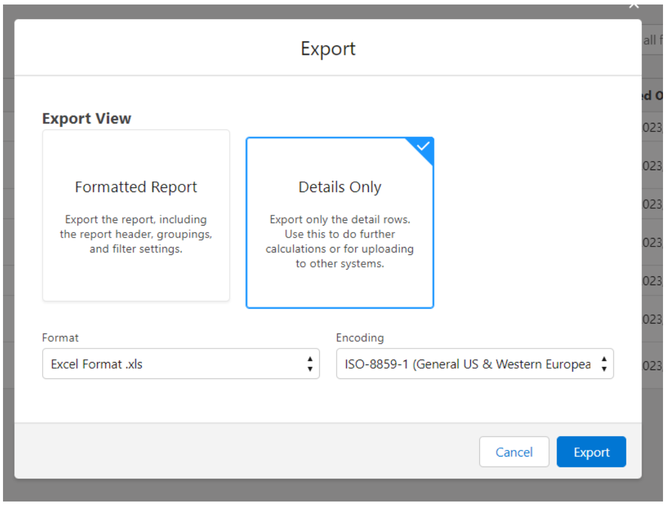


After that we want to export opportunities Report in our system. So, click on drop-down arrow in the line of the respective Report and click on export.



- After that we got 2 options.
    I. **Formatted Report:** if we select the formatted report so the report will download with all headers, grouping and filters. The format of this report is come with only 1 option **.xlsx**.
    II. **Details Only:** if we select the details only so the report will download with only row records. The format of this report is come with 3 formats i.e., **.xls**, **.xlsx**, **.csv.**
    We have to also choose encoding. Download this report if we have a requirement to share this report with other system.





- After selecting anyone option click on Export. So that the reports will download in local system.

<u>Dashboards</u>

- Dashboard can't be created without report.

What is Dashboard?

- A dashboard is a visual display of key metrics and trends records in your org.
- Source of dashboard is reports.
- You can place one report in multiple dashboards components on a single dashboard.
- Having multiple reports on a single dashboard page makes it a powerful visual display tool.

Dashboard folders.

Like reports, dashboard is stored in a folder, so:

- Dashboard folder controls who have access to its content.
- If one has to access to folder, then only one can access its dashboards.

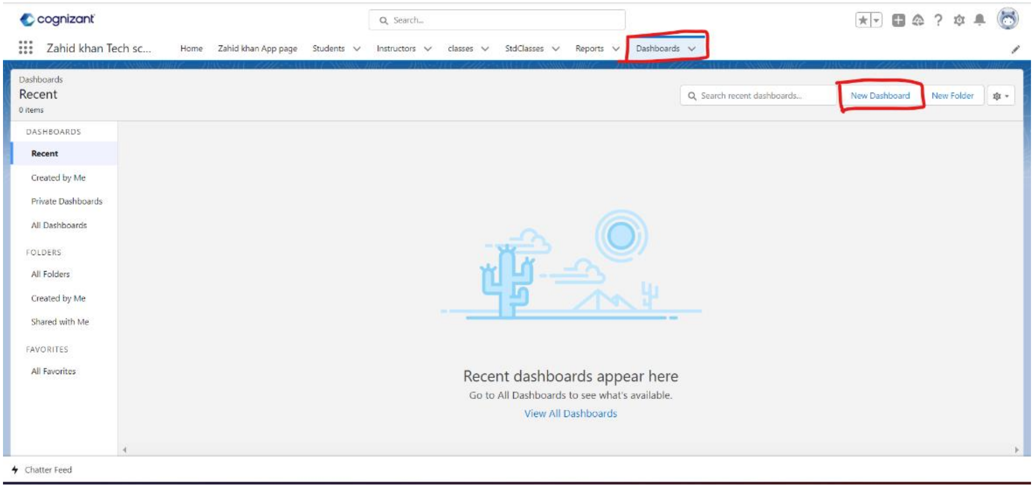
- However, to view the dashboard components, one need access to underlying reports as well.

Important about Dashboard:

- Each dashboard has a running user.
- Running user's security setting determine which data to display in dashboard.
- If running user is a specific user then all dashboard viewers see data security setting of that user, regardless of their own security settings.
- Dynamic dashboards are those for which running user is always logged in user. Here, each user views the dashboard as per their own security settings.

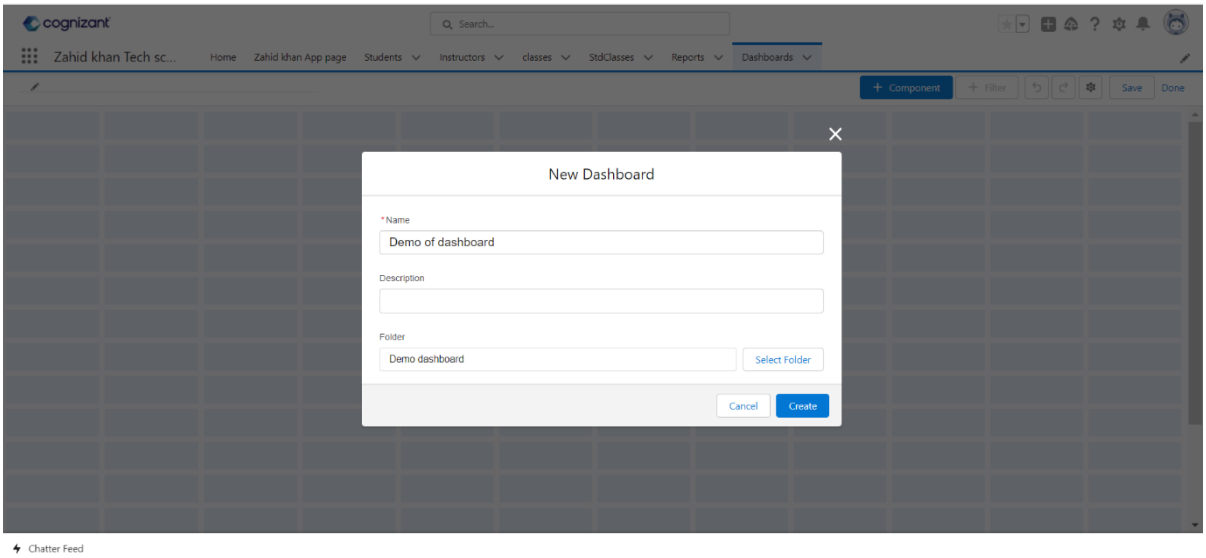
Steps to create Dashboard:

- Go to front-end of the Org. and click on dashboard tab. After that click on **New Dashboard**.

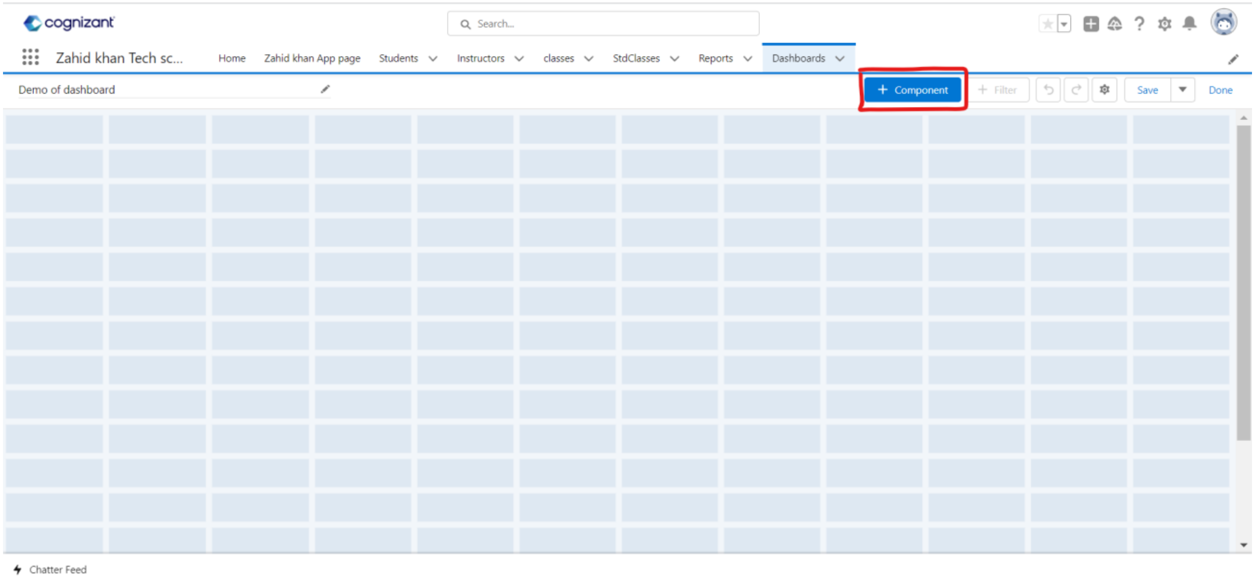


- After that we got a pop-up in which we have to enter Name, description, and choose folder. Note: we will not be able to make dashboard for that report which is in private folder.
- Here we make a folder named as Demo dashboard.

- After that click on Create.

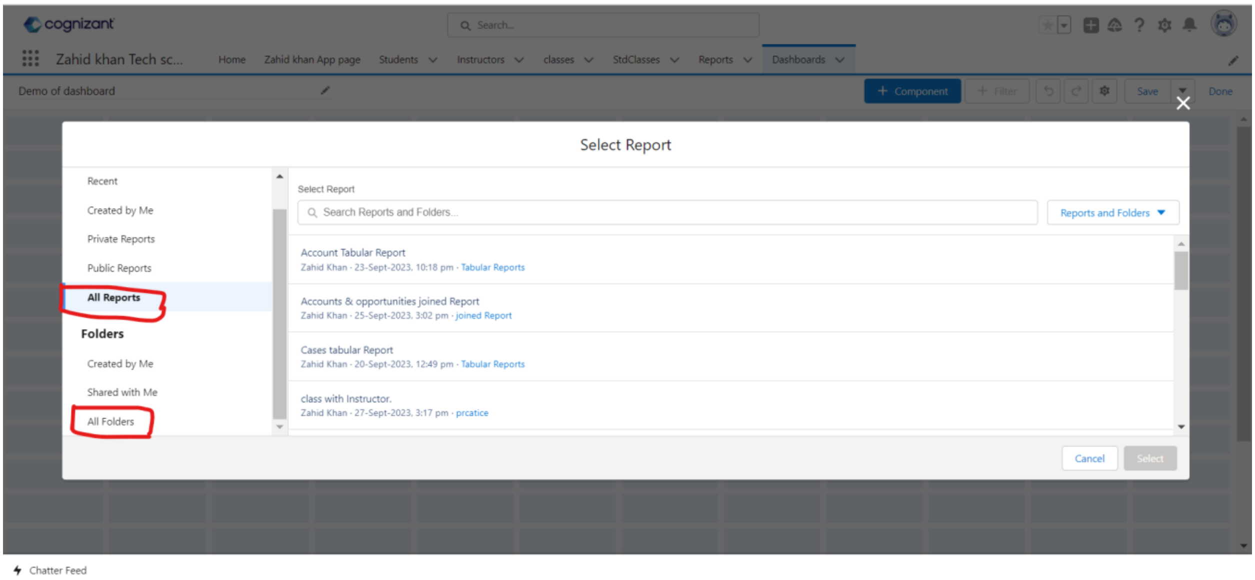


- After that click on +component option top of the page to add the report in this dashboard.

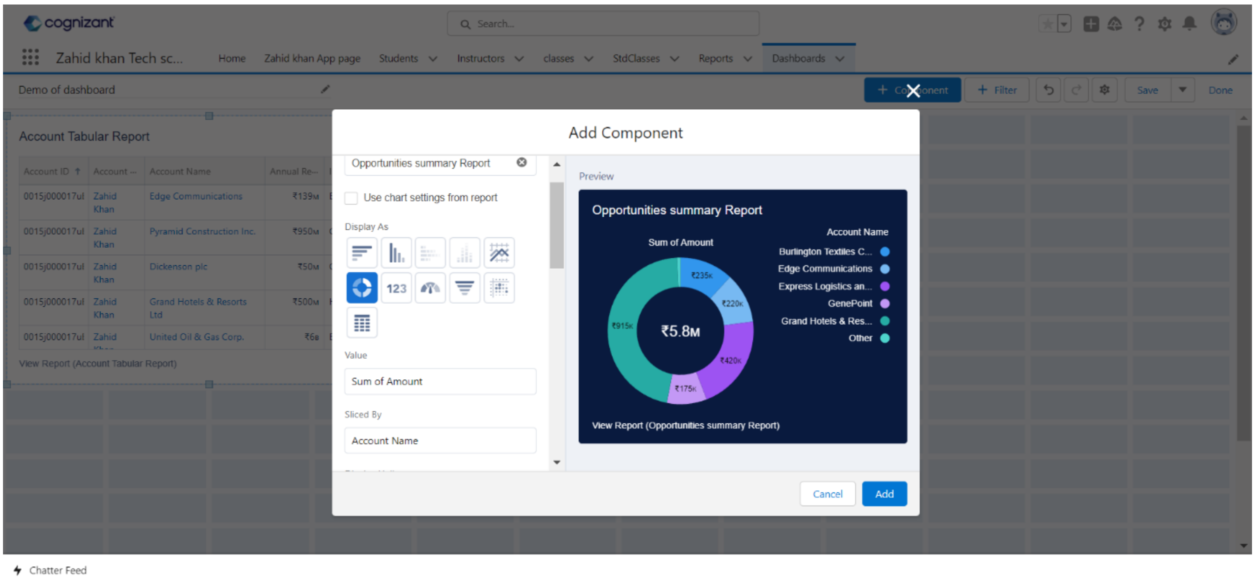


- When we click on **+component** All reports will be visible. If we want to show all reports together then we have to click on All Reports option from left hand side. If we want to choose reports from folder so we have to click on All folder from left hand side.
- We can place all report like, tabular, summary, matrix and joined.

- For tabular report table will add in dashboard. For summary, matrix and joined chart will be Added in Dashboard.

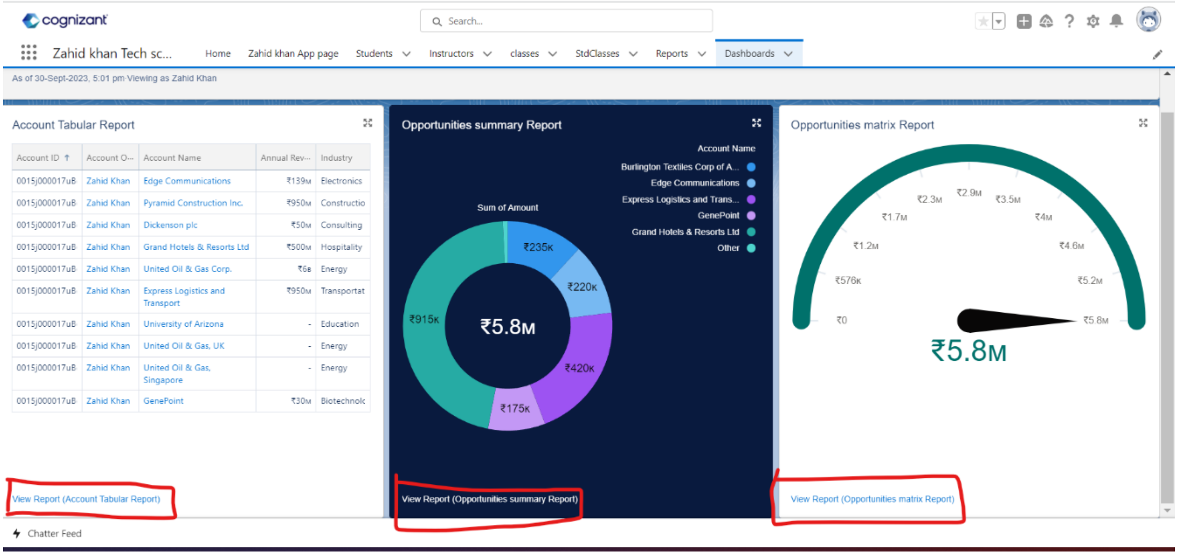


- Here we are selecting All folder and added some reports from tabular, summary, matrix and joined folder to the dashboard.
- After selecting a click on select and then click on Add.
- For summary, matrix, joined report we will select chart here.
- We got lots of option to customize our report chart.

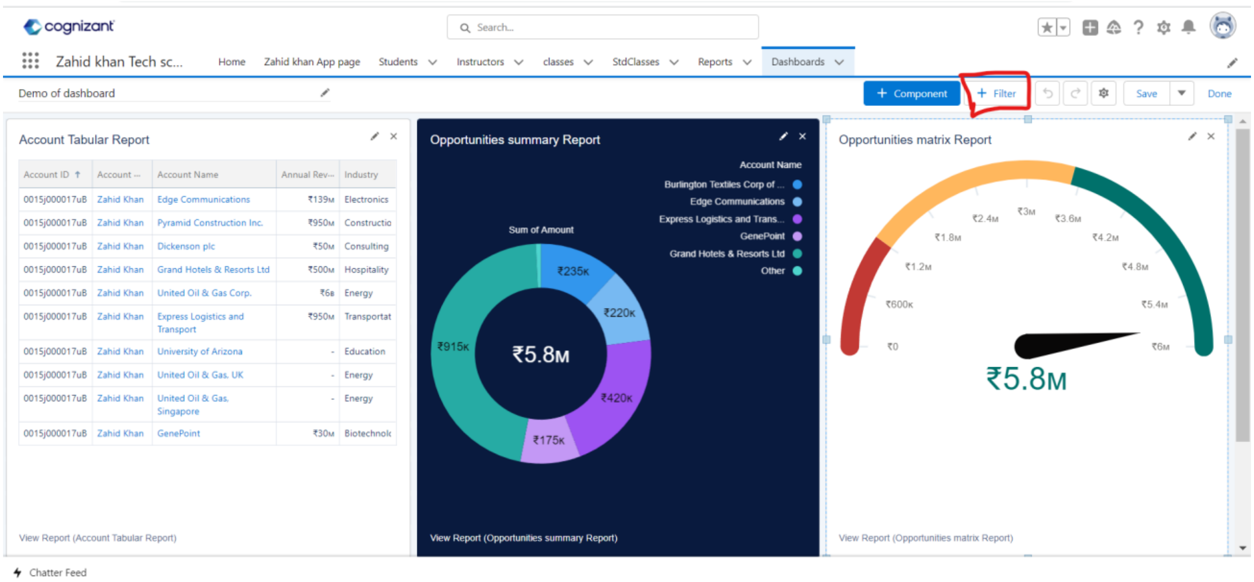


- Click on Add to add this chart on dashboard canvas.

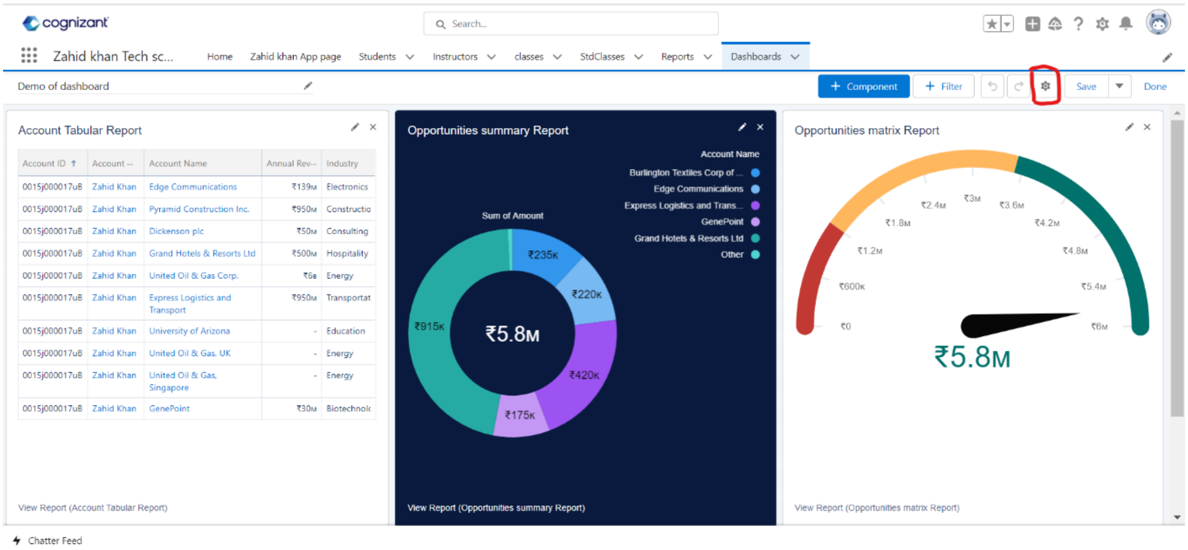
- After Adding all chart click on save and done.
- After that we will see our dashboard inside the folder which we created.
- We have also a report link at below of the chart on dashboard if we click on that click so it will redirect us to the Report.



- We have a Refresh option to refresh the chart if we make any changes in report, edit button and subscribe button in which we have download, delete, save as and new dashboard option.
- We can also Apply filter in our dashboard.

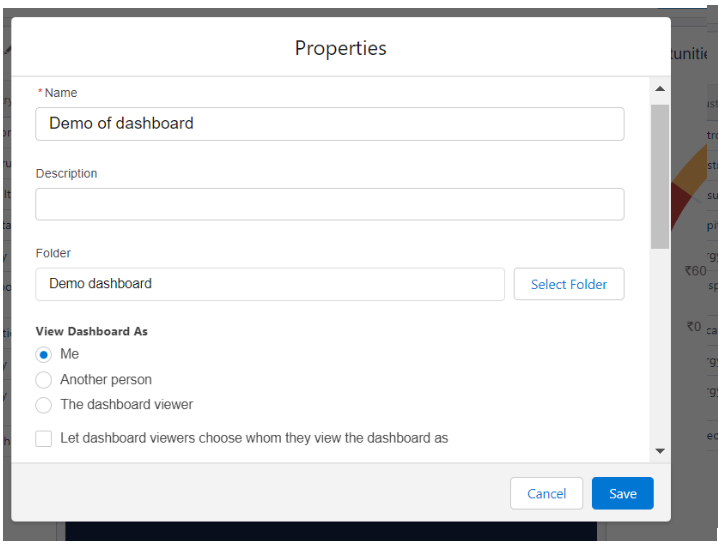


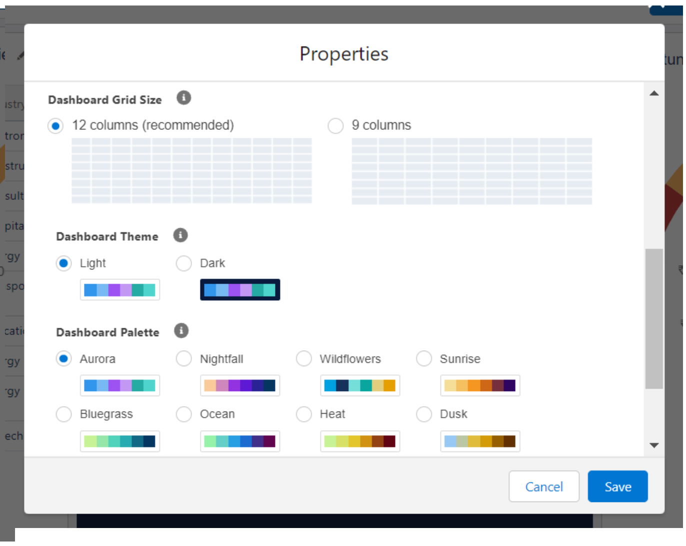
- Click on setting icon beside save button. We will see page configuration of



dashboard.

- After that we got a properties pop-up in which name of the dashboard is available, description, Folder, view dashboard as like, Me, another person (we have to select the user), The dashboard viewers (best option), dashboard Grid Size like 12 column or 9 columns. Dashboard theme like light or dark and dashboard palette.



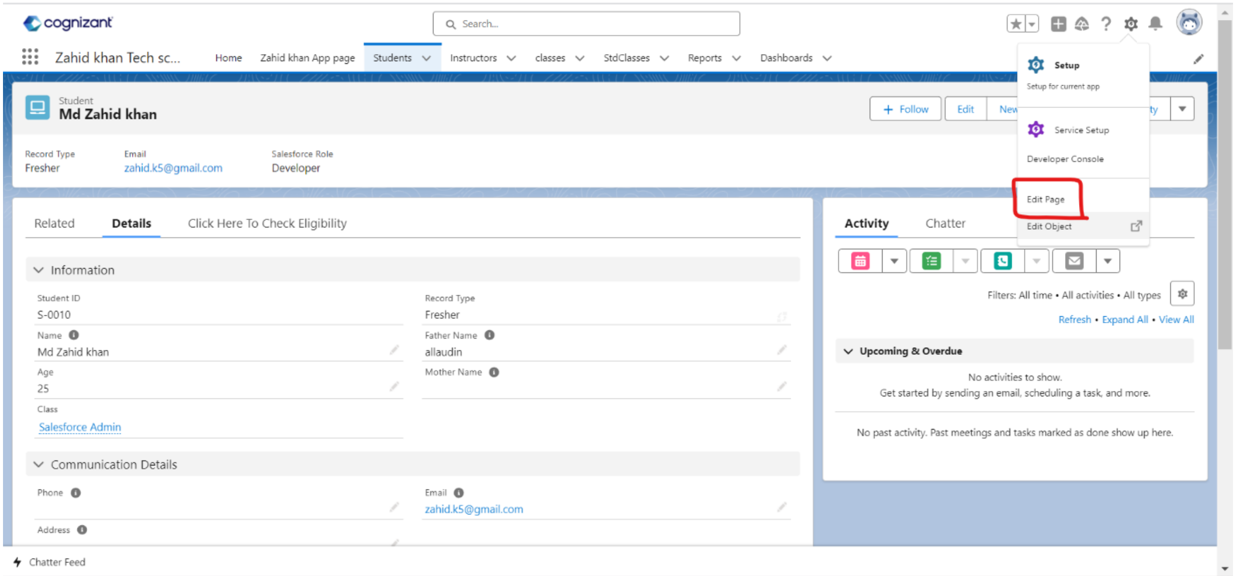


Reports and dashboard on Lighting page

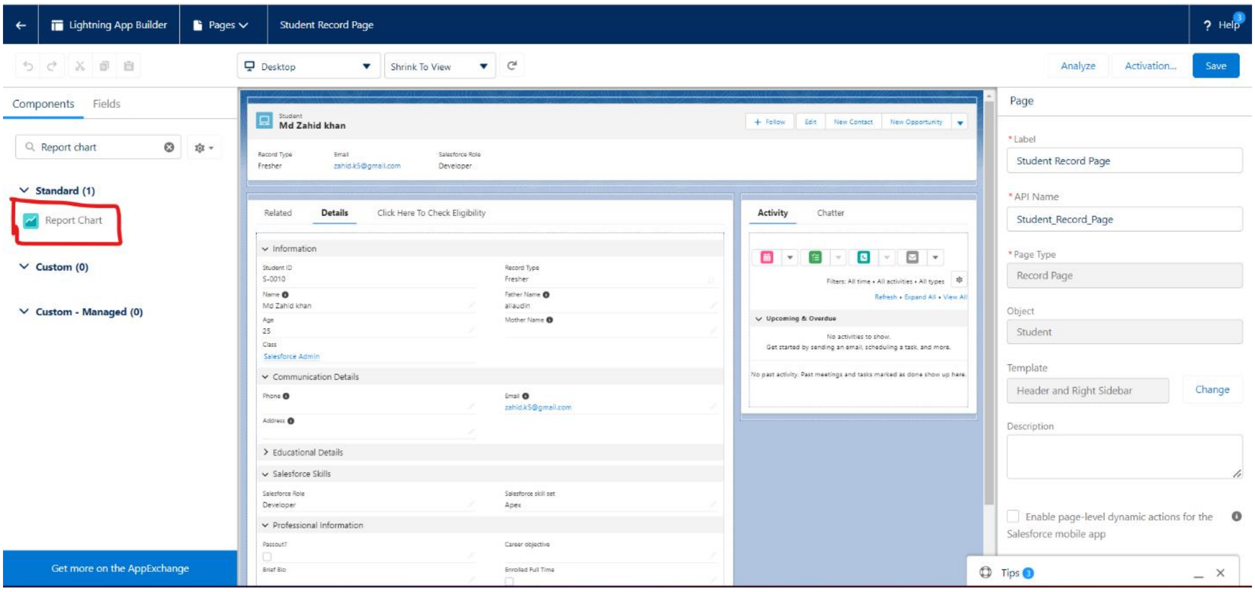
- As we know that there are three types of lighting page Home, Record and App page.
- We can add reports chart in our home, record, and App page.

Steps to place Report chart on Record page:

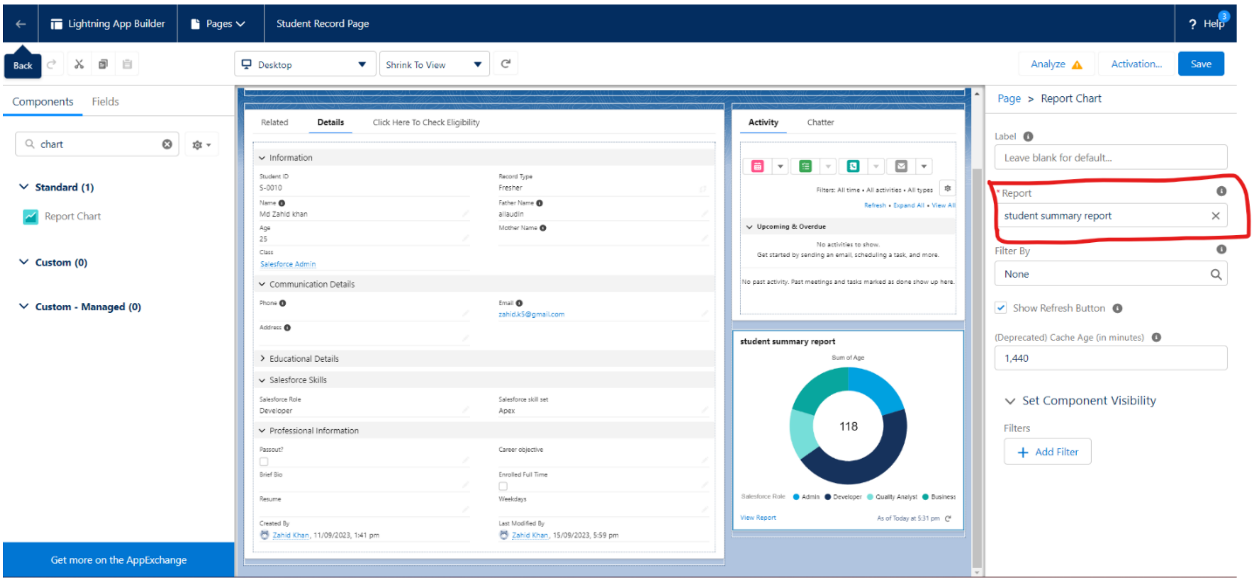
- Previously we were created Report on student object, so we are going to place Report chart on student record page.
- Click on student page on front-end and open any record. After that click on set-up icon on top and select Edit page.



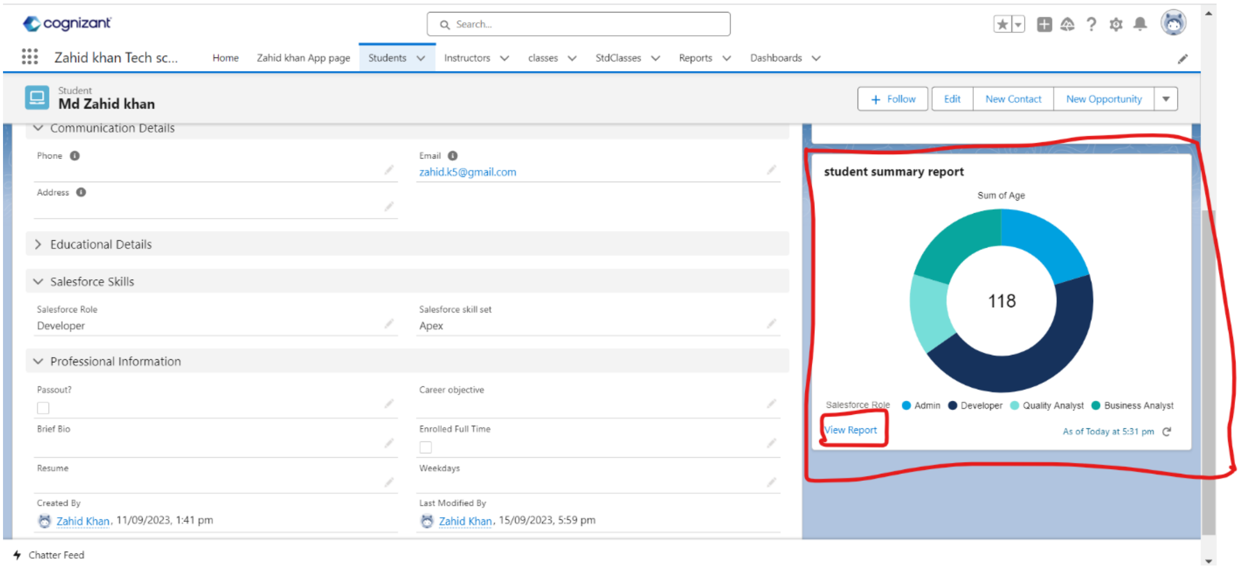
- After that search for Report Chart. And drag it to below of Activity page.



- Now select student summary reports in Report field at right hand side.

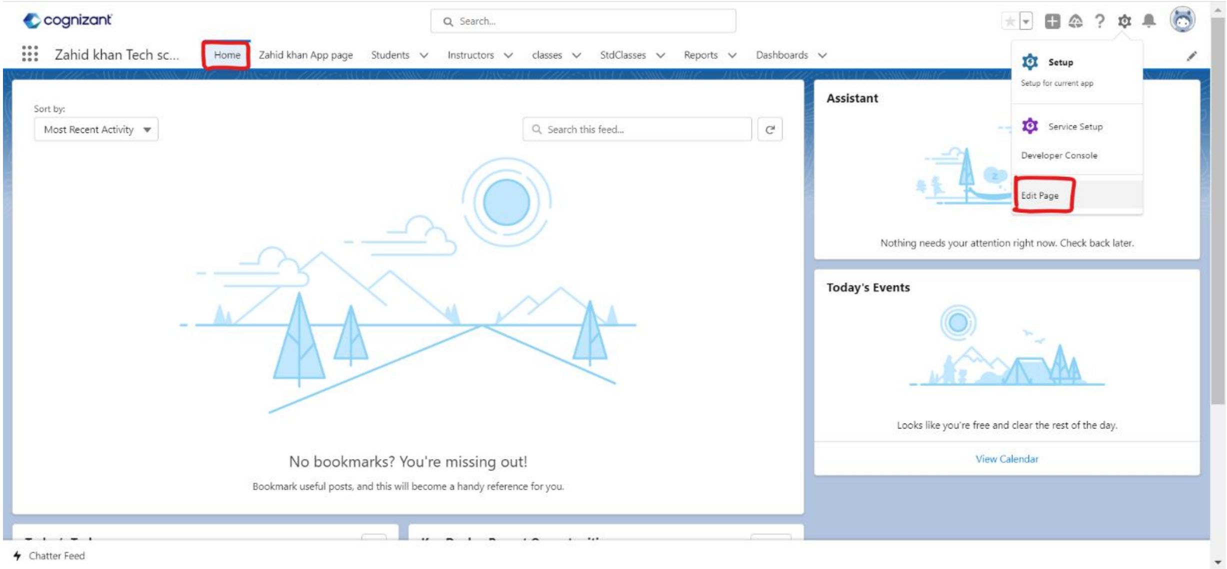


- After that click on save. Now go to front-end and check that the chart of student report will be visible in all records of student object.
- If we click on View Report so it will redirect us to the respective report page.

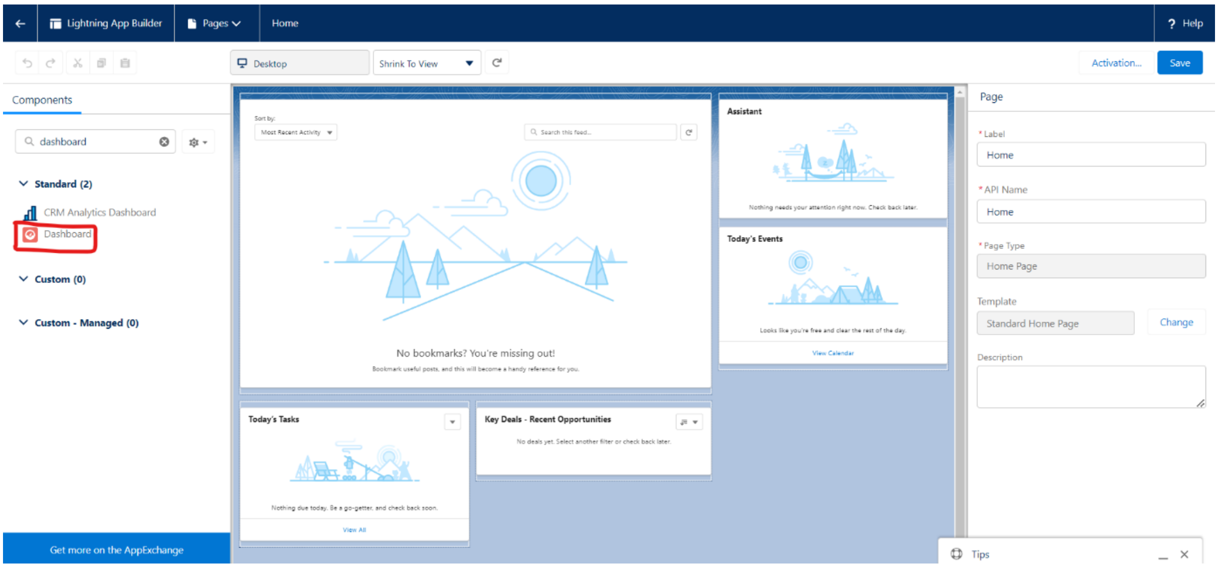


Steps to place dashboard and report in home lighting page:

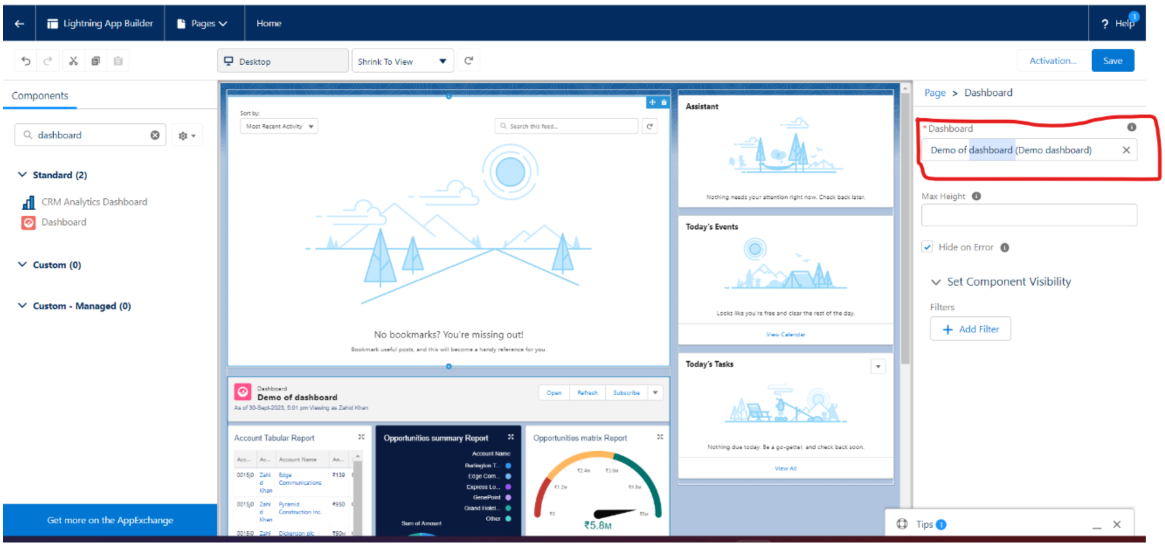
- Click on Home tab which we created previously after that click on setup and click on Edit page.



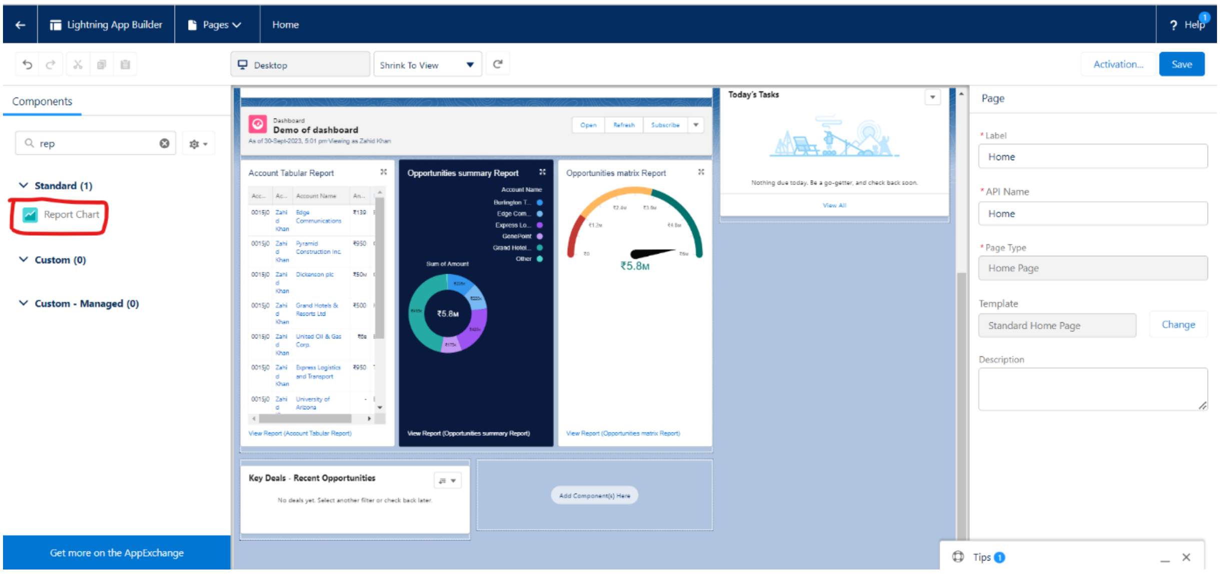
- After that search for **Dashboard** on left hand side search bar.



- Drag it to the home page. And select the Dashboard folder from Right hand side. Currently we have only one folder so its showing one dashboard only.



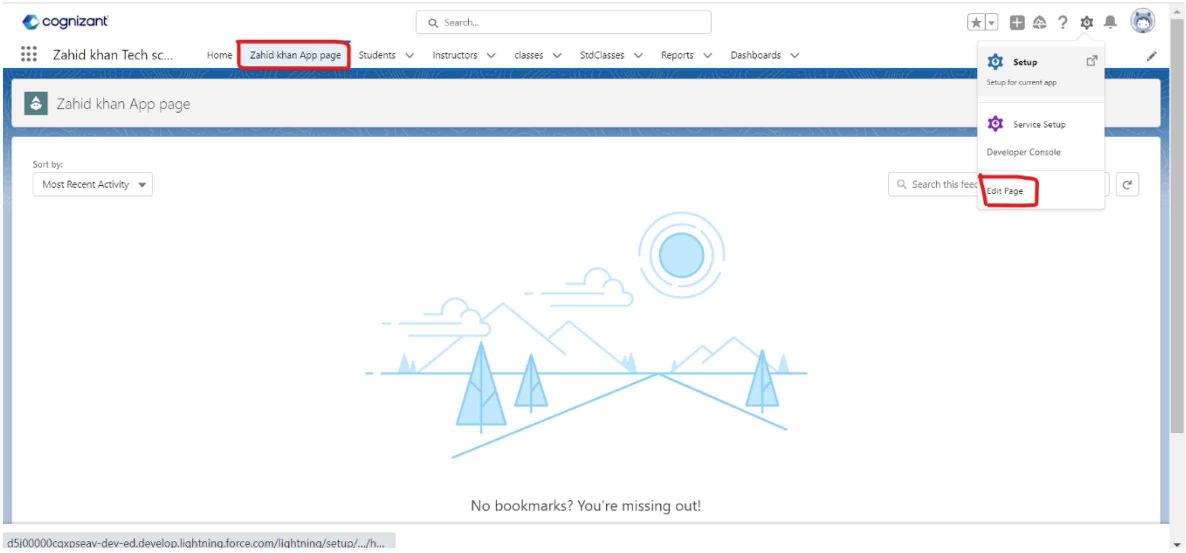
- We can also add **report** on home page. For this search for report Chart and drag it to the home page. We can select any report from Report field from right hand side.



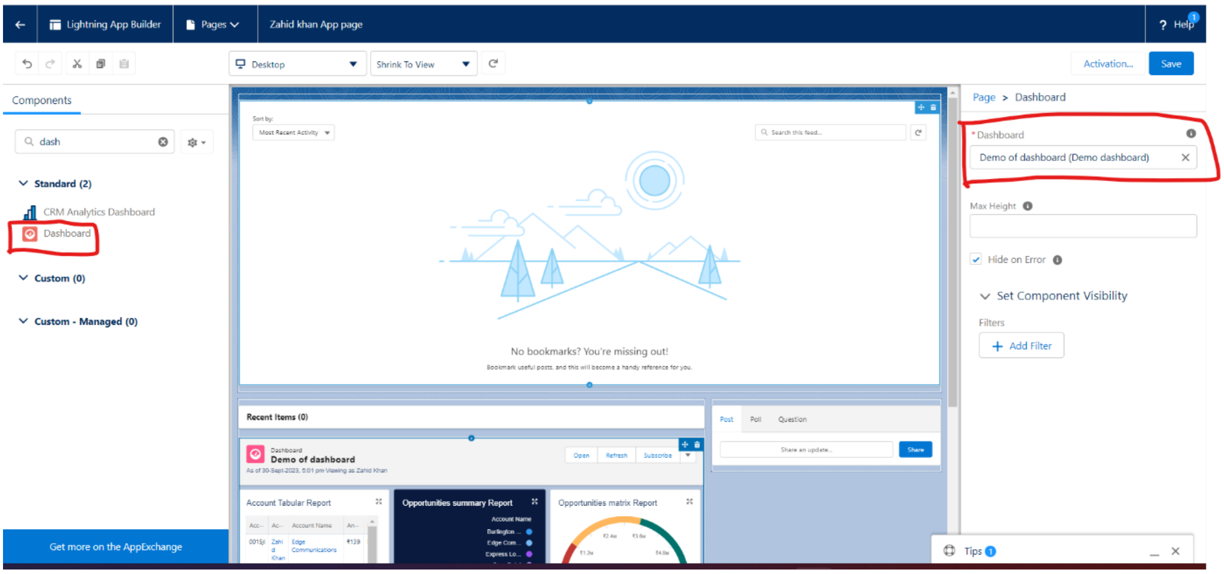
- Now click on save.
- Go to Front-end and check.

<u>Steps to create Report and dashboard in App page:</u>

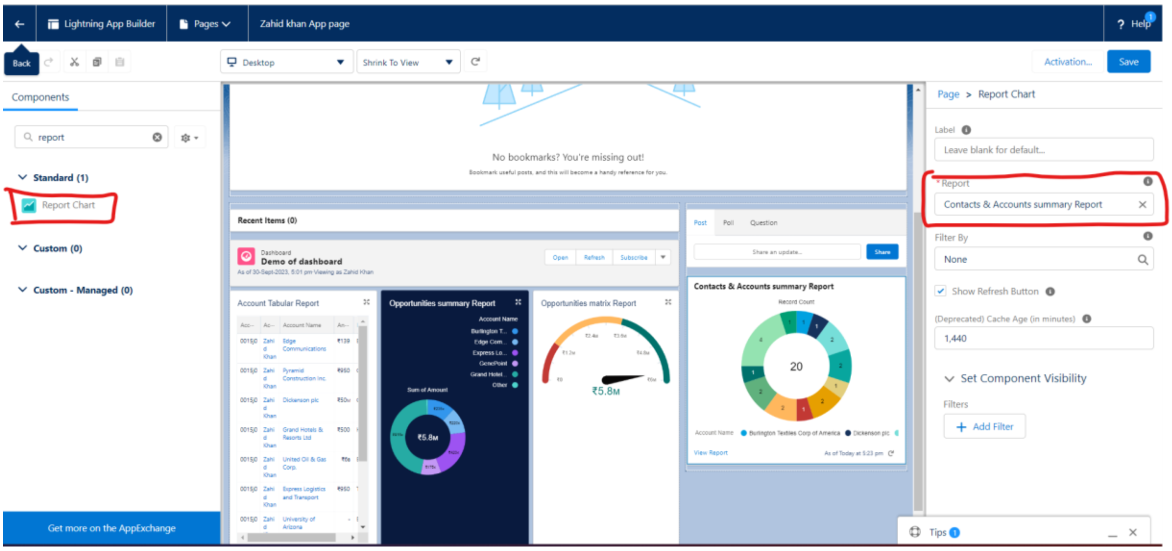
- Like home and record page we can add dashboard and report in App page.
- Click on App page on front-end of the page and after that click on set-up icon and click on edit page.



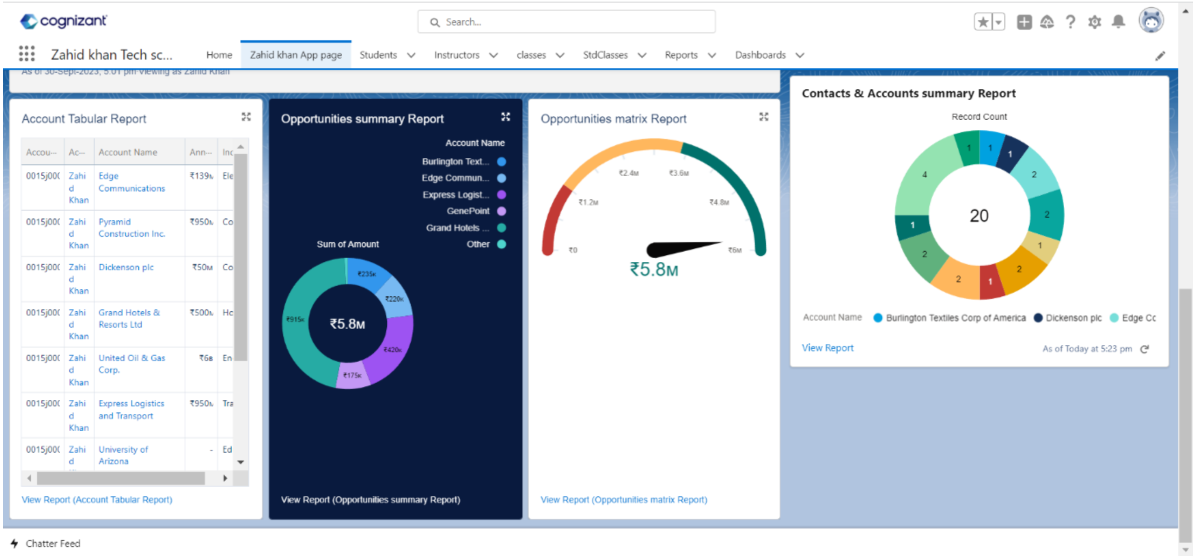
- After that search for dashboard and place it inside the App page. Then select the dashboard folder from right hand side.



- For insert the report search for report chart and drag it inside the app page. After that select the report from right hand side.



- After that click on save.
- Go to front-end and check the dashboard and report will be visible in App page.

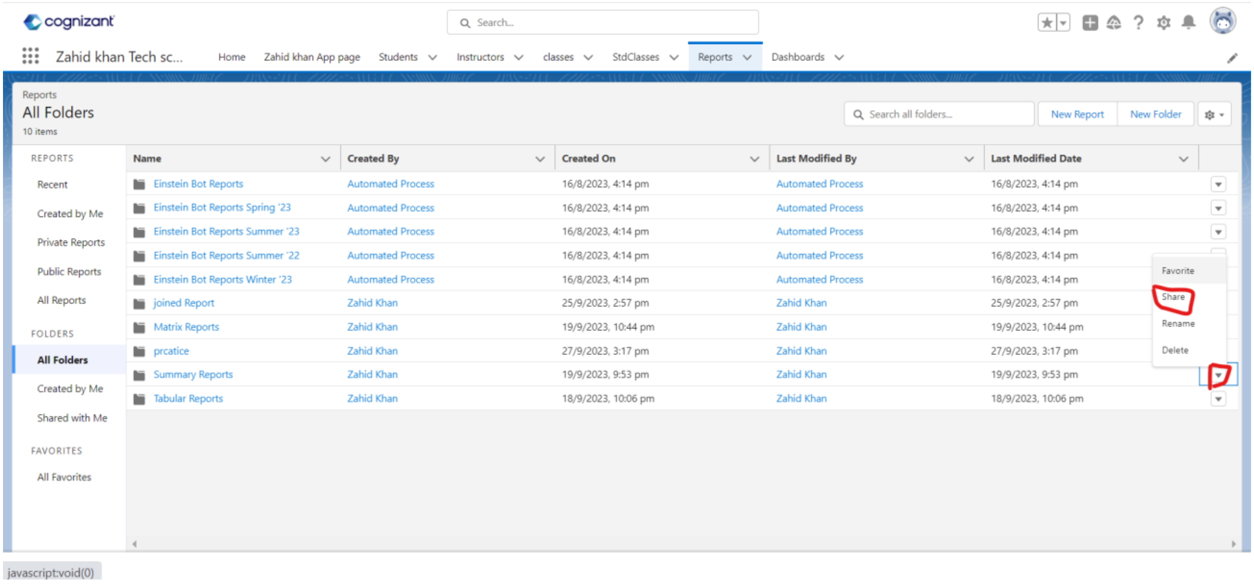


<u>Share Report and Dashboard</u>

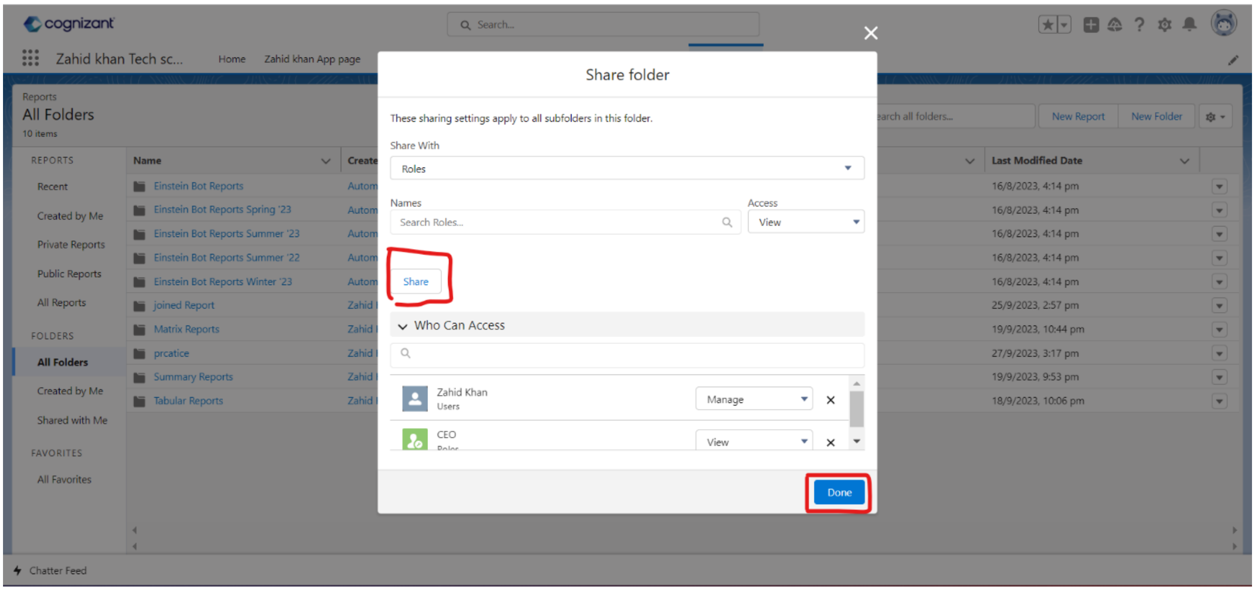
- Sharing the reports and dashboard between users.
- In report and dashboard, we can share Folder not individual report or dashboard.

<u>Steps to share report and dashboard:</u>

- Go to Report tab on Front-end after that click on **All folders** to show the available folder. After that open any folder (which you want to share). For example, we are taking summary report folder. After that click on drop-down arrow along with the folder.
- After that click on share option. So, that we can share complete folder with another user.

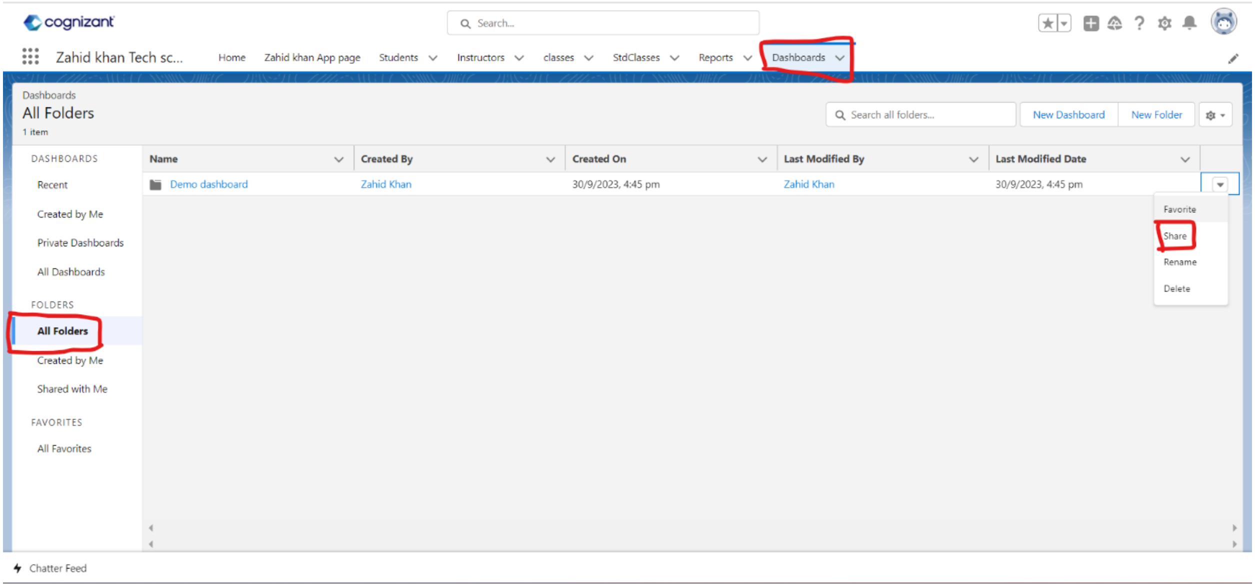


- After clicking on share one pop-up will open in which we have to select the user with share this report, Names, Access like, view, manage, edit. After that click on share button so that user will add below. At last, click on done so this report will share with respective users.

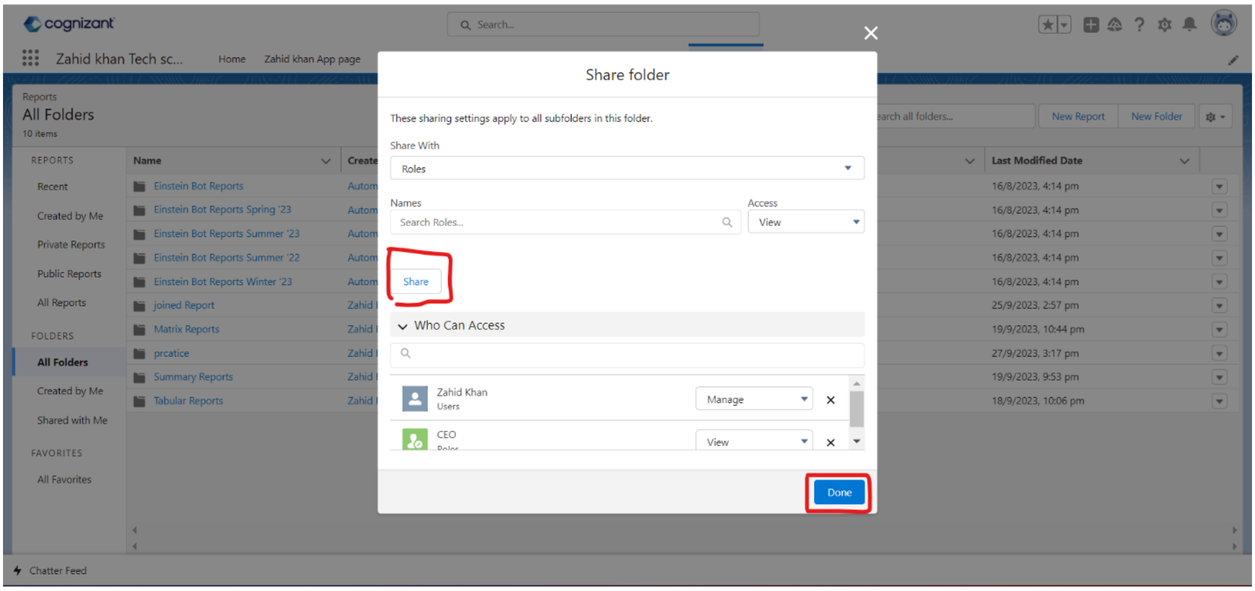


<u>Steps to share dashboard:</u>

- Go to Dashboard tab on Front-end after that click on **All folders** to show the available folder. After that open any folder (which you want to share). For example, we are taking Demo dashboard folder. After that click on drop-down arrow along with the folder.
- After that click on share option. So, that we can share complete folder with another user.



- After clicking on share one pop-up will open in which we have to select the user with share this report, Names, Access like, view, manage, edit. After that click on share button so that user will add below. At last, click on done so this report will share with respective users.



Day-11

Introduction:

- Data security is important because you need to control what a user or group of user can see in the org or app.
- Salesforce provides layered sharing model.
- You can easily assign different data sets to different group of users.
- You can control access to your whole org, any specific object, fields, and records.

Level of data Access:

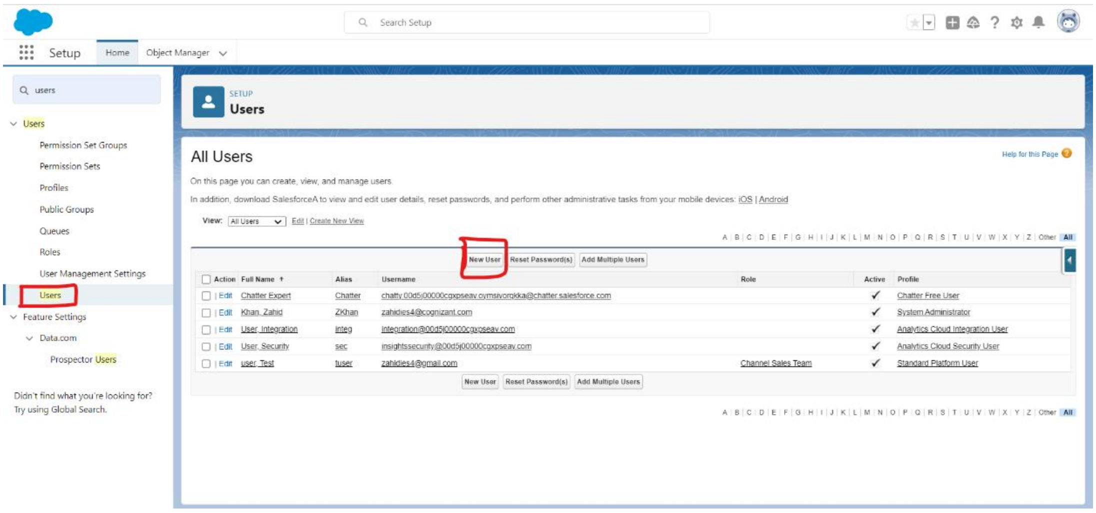
- Organization
- Objects
- Fields
- Records

Organization:

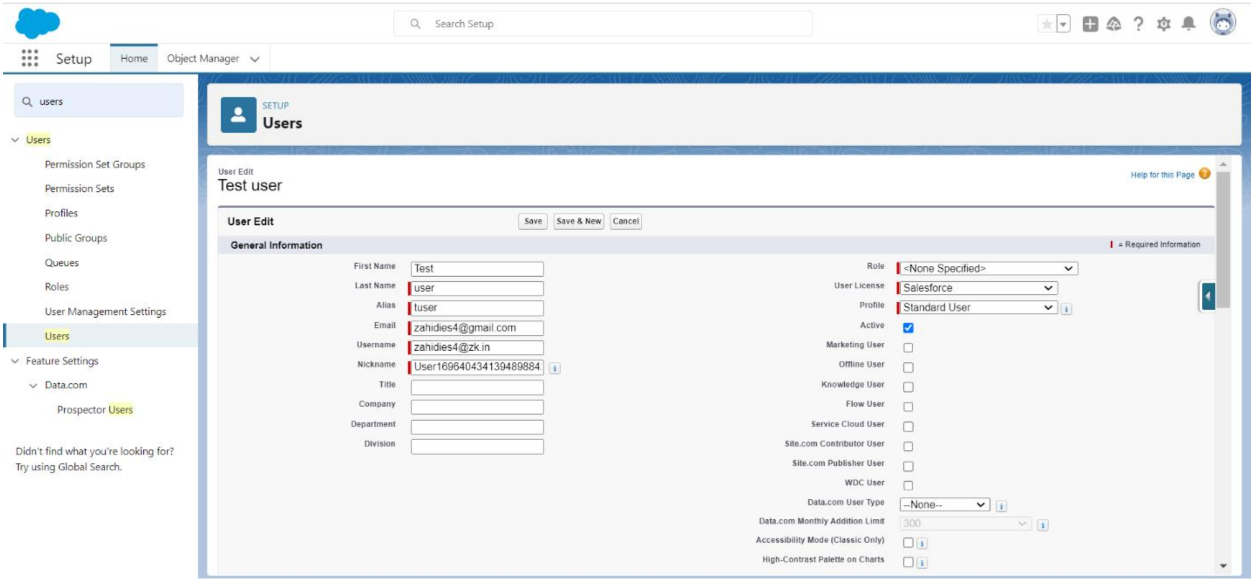
- Maintain a list of authorized users.
- Set password policies.
- Limit login to certain hours and locations.
  I. Limit IP addresses from which users can log in.
  II. Limit the times at which users can log in.

Steps to create User in Org.

- We can create no. of user in our org and control the access like what they can see and what they can do. In developer edition we can create max. 2 users in free trail license.
- To create a user, go to setup and search for **Users** and click on it. After that click on **new Users**.

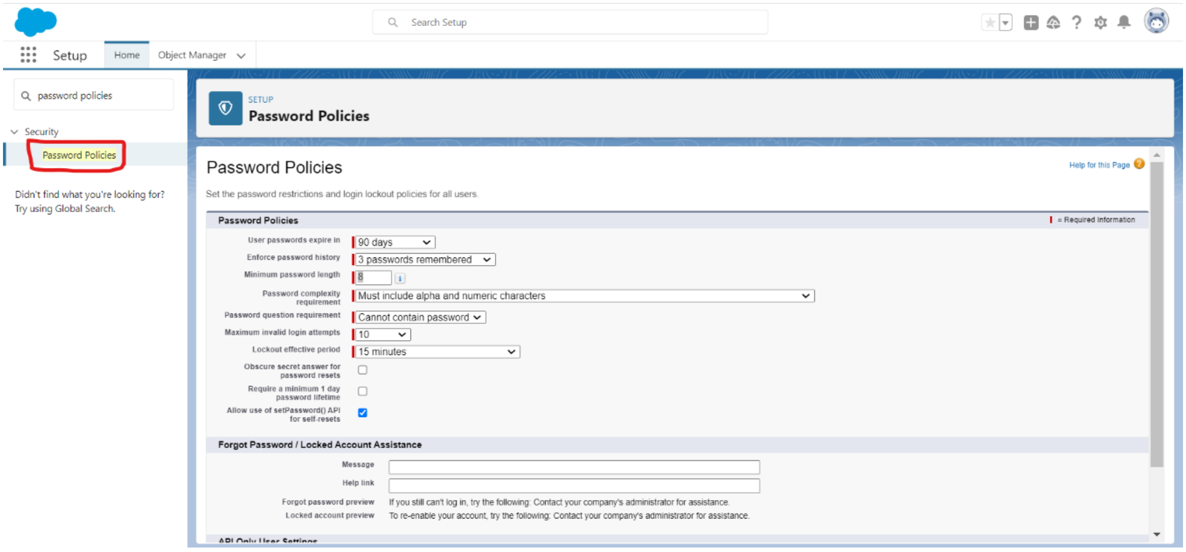


- After that enter first name, last name, username, email select role, select role, select user license as **salesforce** and profile as **standard users** the details & check the box **generate new password and notify user immediately** and click on save new users will be created.



<u>Steps to set password policies:</u>

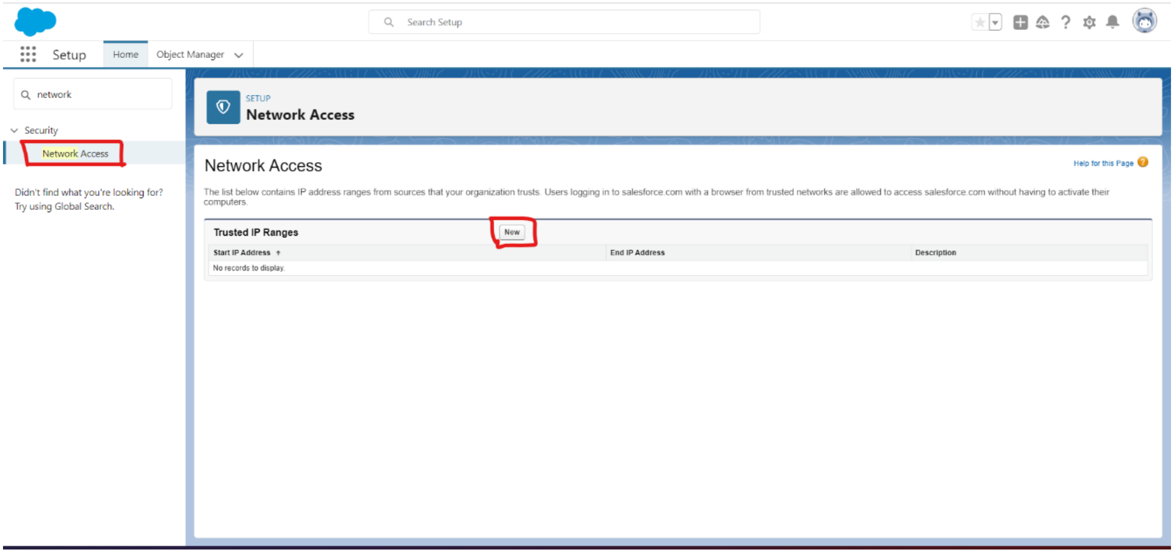
- Go to set up and click on home after that search for password policies in Quick search. And click on this.



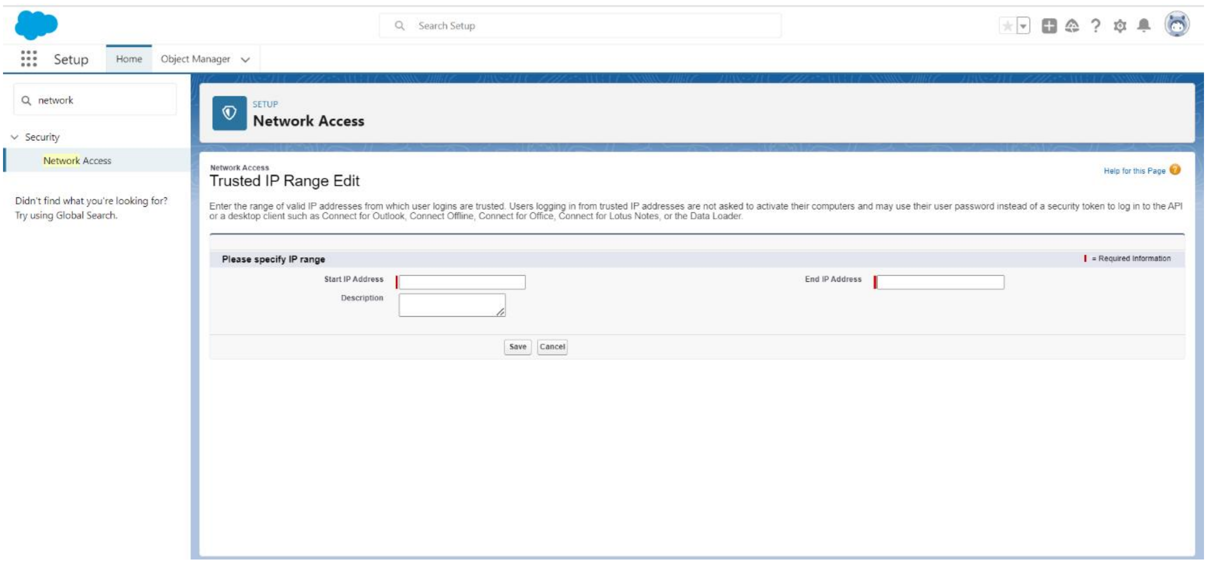
- Now we have to select the Options based on requirement and save. So that policies will set.
- This password policy will control the whole org.

Steps to Limit IP address and locations:

- Go to set up and search for **network access** in Search box. And click on it. After that click on new.



- We have to enter that range of Ip address start and end Ip address.
- Now enter that start and end Ip address and click on save.



Object level security:

- You can control level permissions for both standard and custom objects.
- You can set permissions for a particular object.

- You can give permissions to view, create, edit, and delete any records of that object.
- You can control object permissions using profiles and permissions sets.

Field level security:

- You can restrict access to certain fields in salesforce, even if user has object level access.
- You can make a filed visible to a particular user and can hide that from another user.
- You can give read and edit permission to a field, if you don’t give both then that field will not be visible.
- Field level security can be controlled using profiles and permissions sets.

<u>Profiles</u>

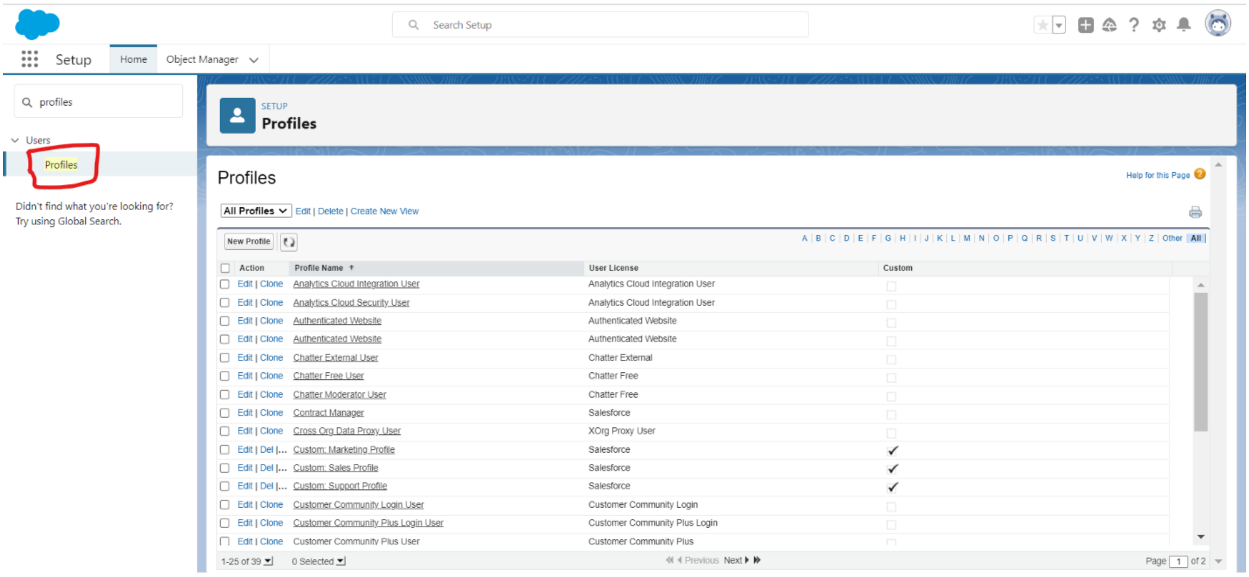
- We can control the access of objects and fields using profiles.
- A profile setting determines which data the user can see, and permissions determine what the user can do with that data.
- A profile can be assigned to many users, but a user can have only one profile at a time.
- To create new profile, you need to clone existing profile.

What can be controlled through profile?

- Assigned App & Assigned connected Apps.
- Object settings.
- App permissions.
- Apex class & Visual force page access.
- External data source access.
- Named credentials access.
- Flow access.
- Custom permissions & custom metadata type.
- Custom settings definitions.
- System permissions.

<u>Steps to search about profiles:</u>

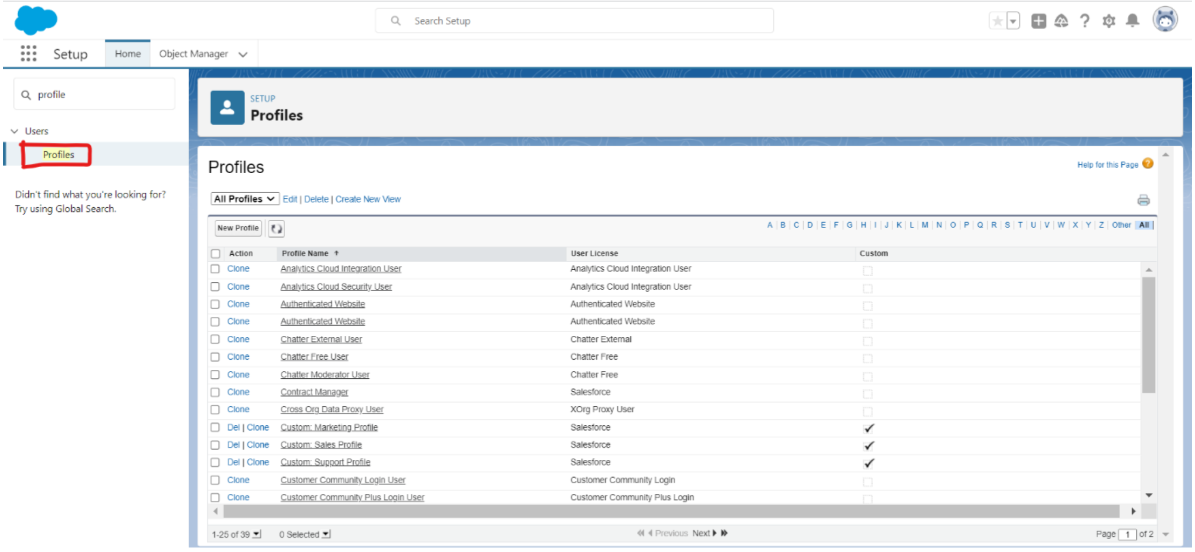
- Go to set up and click on home after that search for profiles in quick search box and click on it.



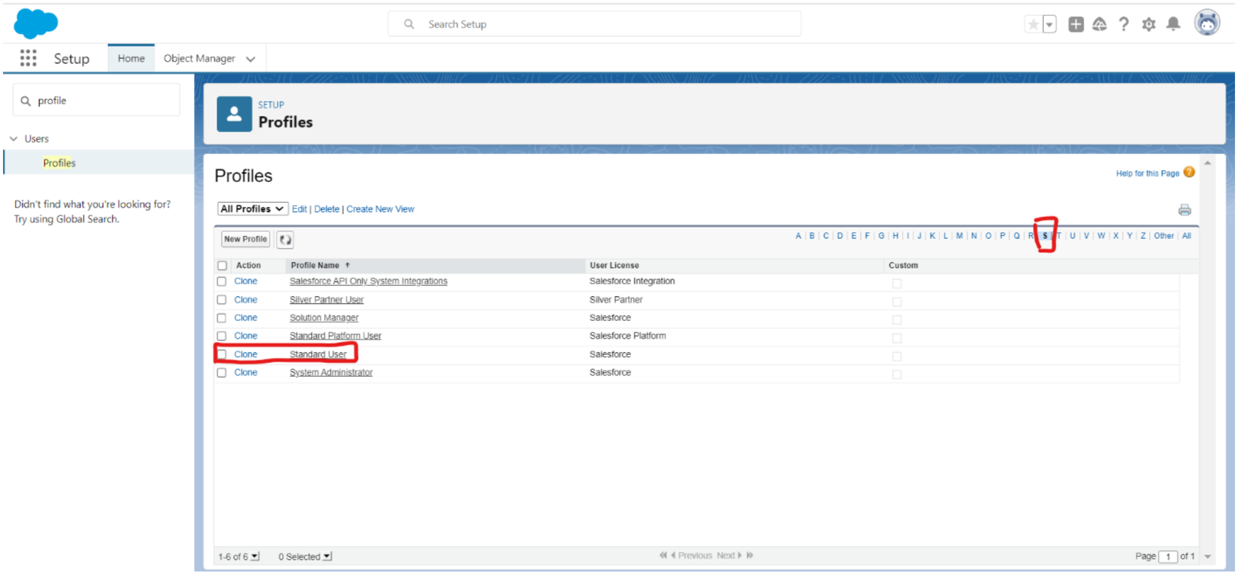
- In this page we can see all the available profile which is created in this org.
- When we have requirement to create a profile, we create **standard user** profile by cloning standard user. Because it has all permissions.

Steps to create new profile:

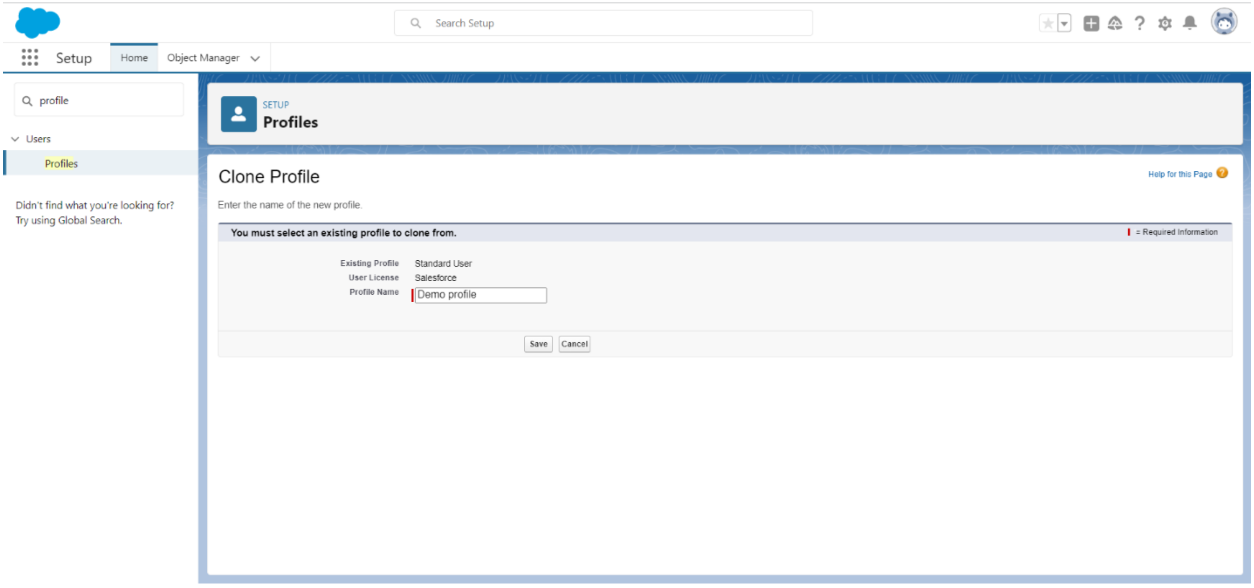
- Go to set-up and search profiles in Quick box. After that click on it.



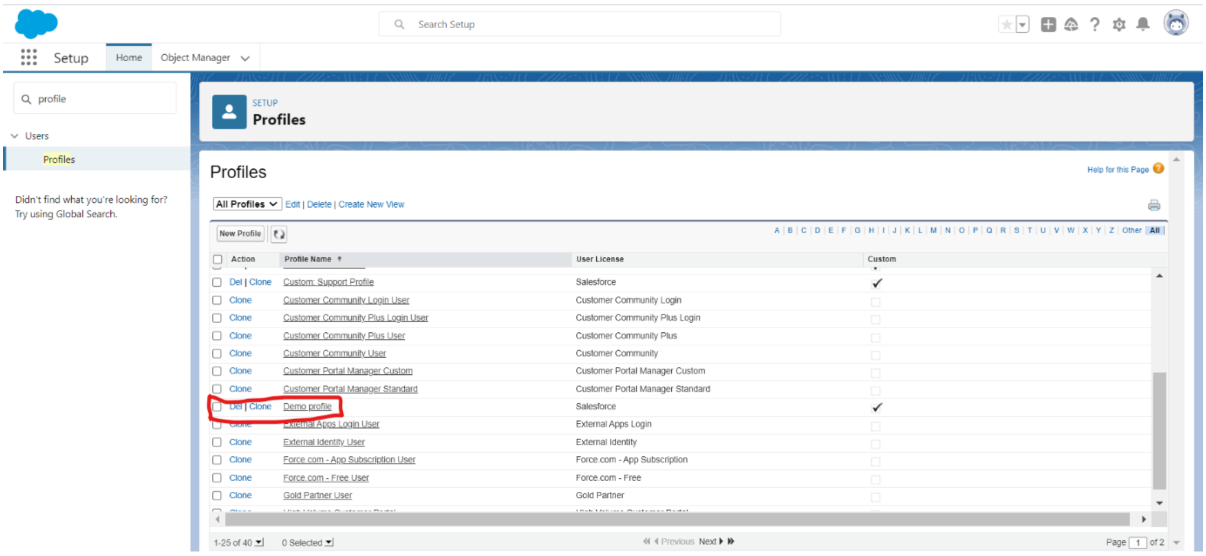
- After that click on S alphabet and search for **Standard users**. And click on Clone. When we want to create any profile just **clone** standard user don't edit any profile which is available.



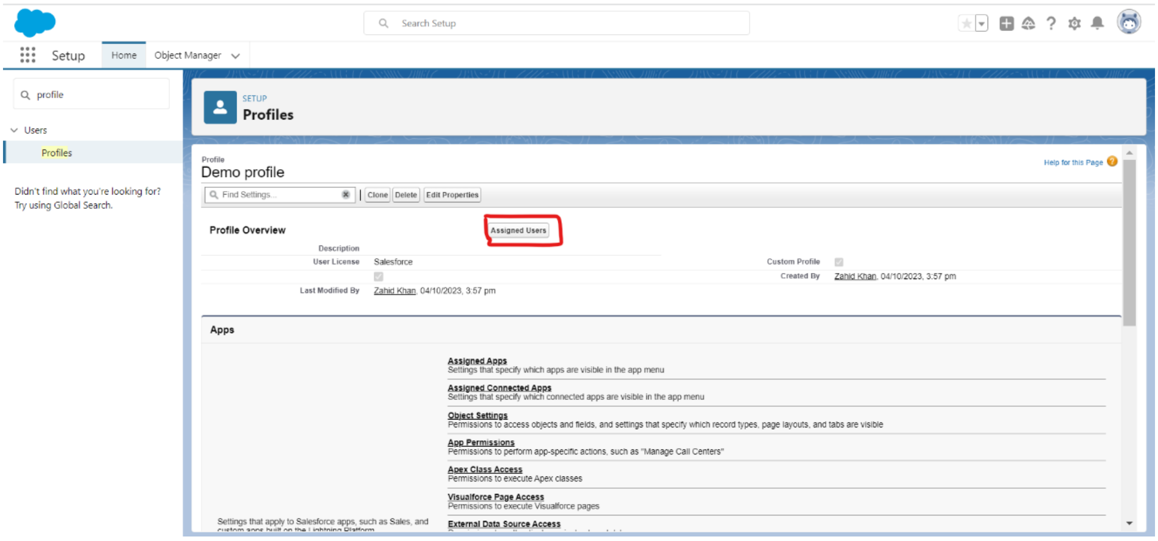
- After that enter profile name. and click on save.



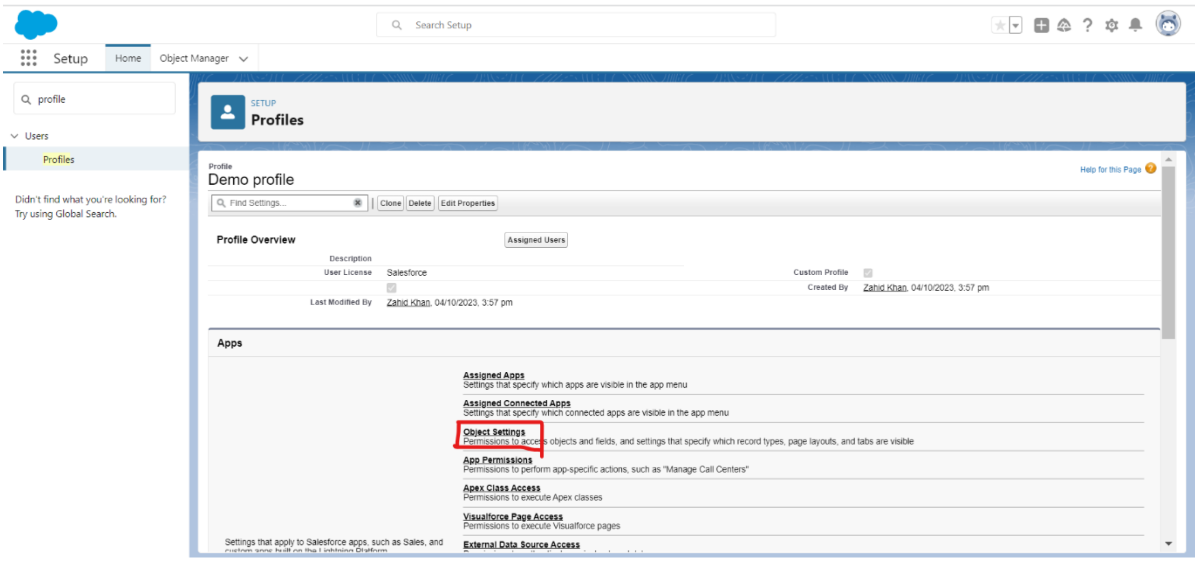
- Now new profile is created. Click on profile again and search on list we will see created profile i.e., **Demo profiles**.



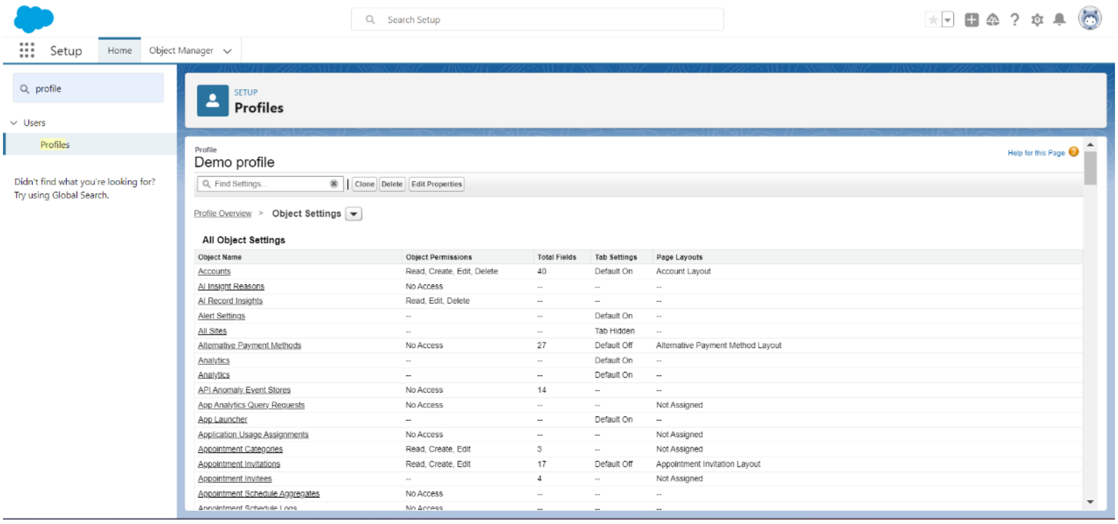
- Now click on Demo profiles. So, that we can see all permission inside this profile. And when this profile assigns to any user that user get all permission which is in that profile. When we click on **assigned user** button, we can see all user which is assigned to that particular profile.



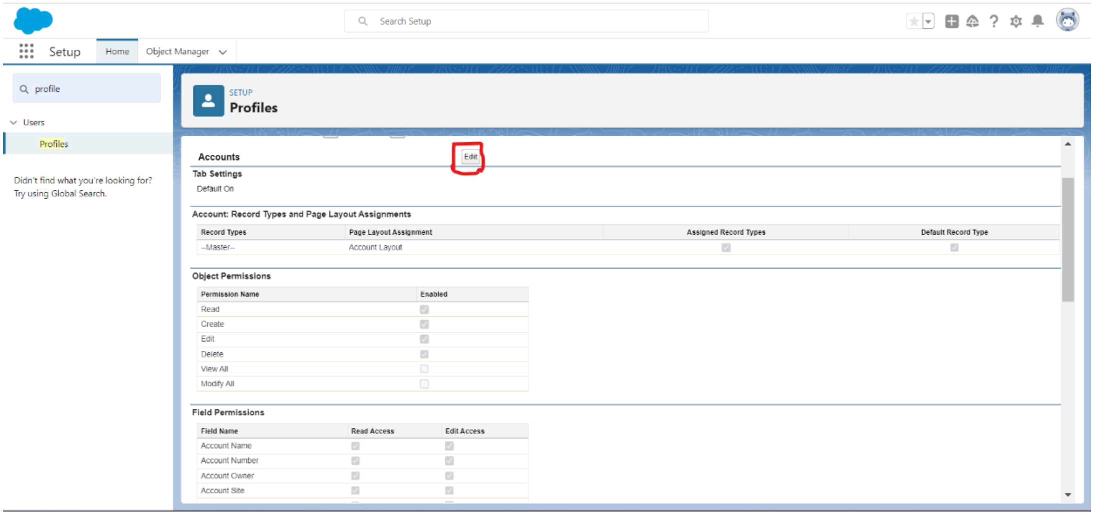
- now we can edit the read, write, edit, delete access of any object for this profile. We can Control the access of any of these setting. For example, we are edit object settings of newly created profile i.e., demo profile. For this click on click on object setting.



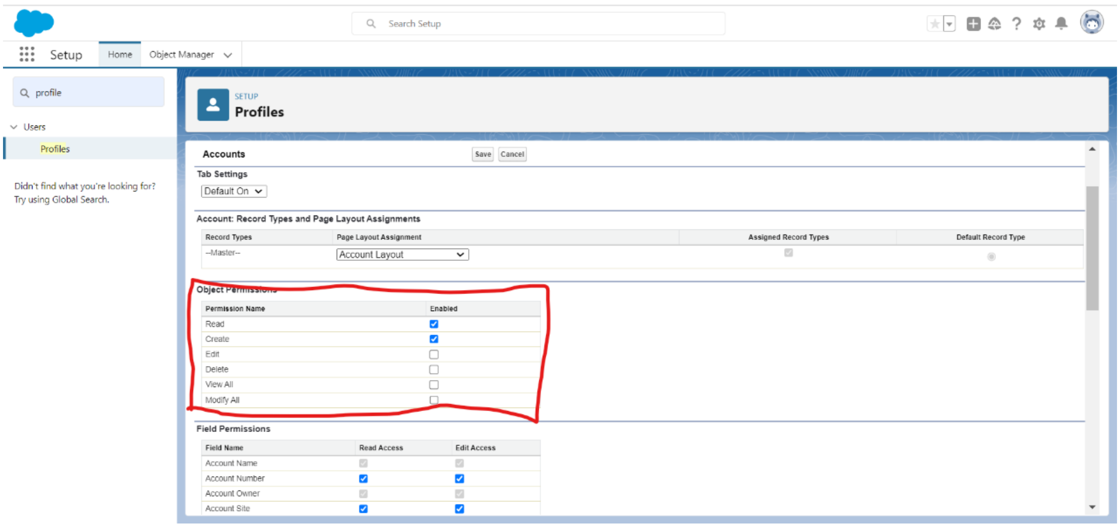
- After that we get list of all objects in our org. Here, we are selecting Account object for and modify few permissions.



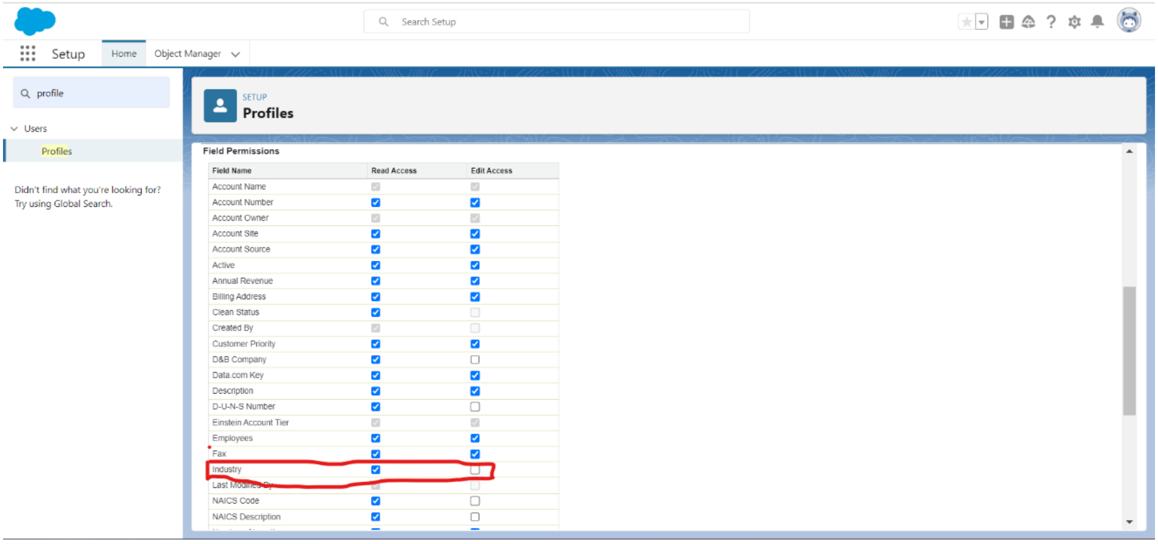
- After that click on edit button to edit the object permission and field permission.



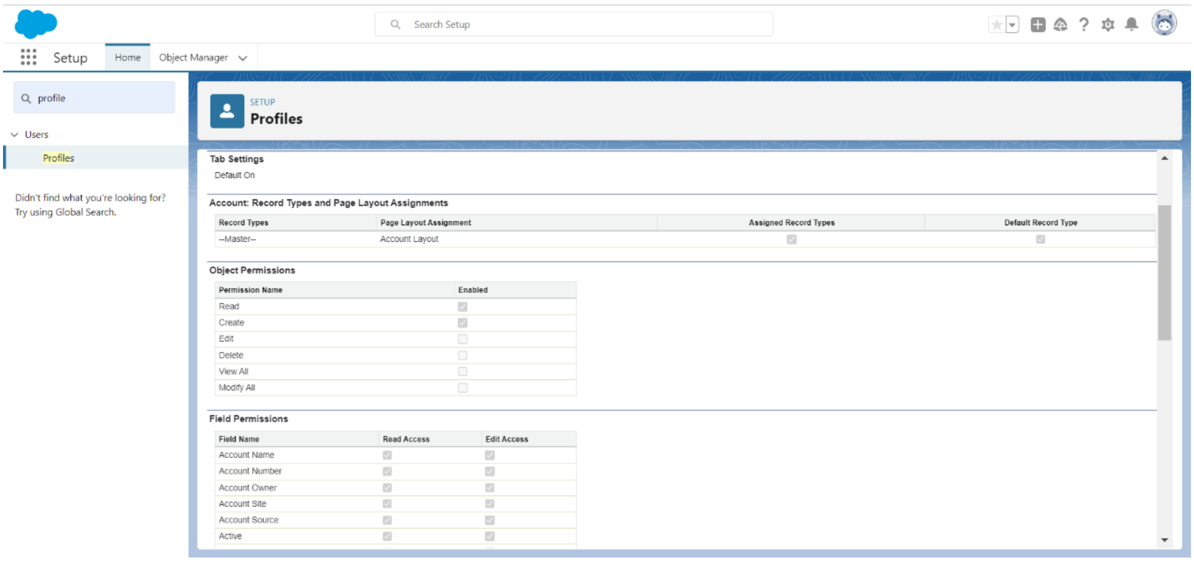
- Now we uncheck the box of edit and delete because we don't want to give this access of account object for this profile. Only create and read access give this profile.



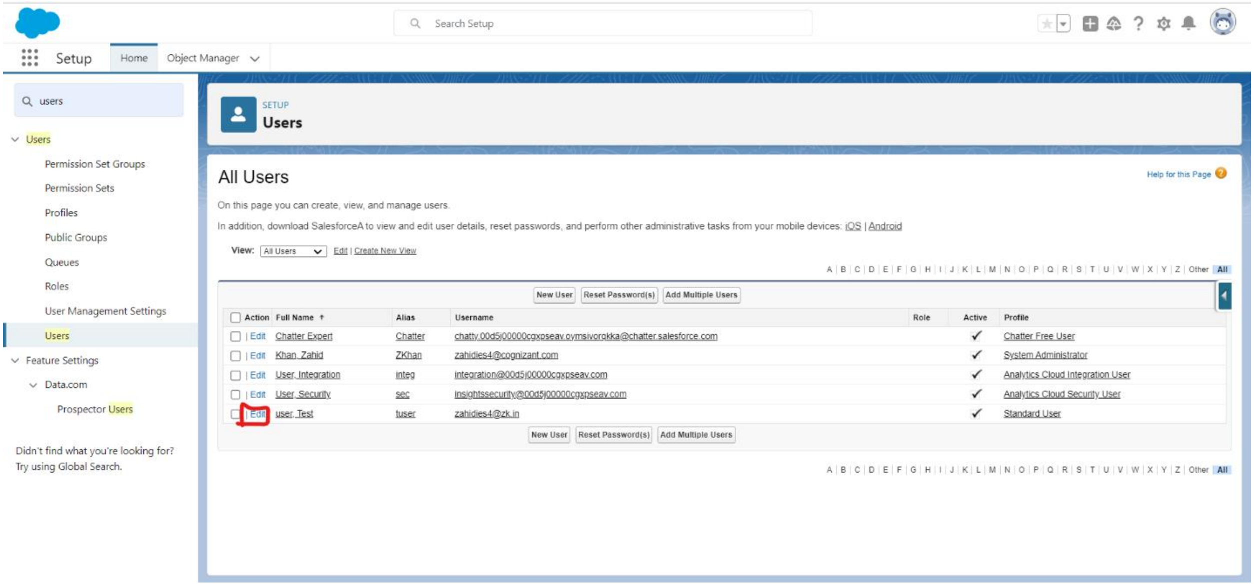
- We can also modify edit and read permission of any field of that object. In field level permission we have 2 options edit access and read access.
    I. If uncheck both boxes so that fields won't be visible in object.
    II. If we checked read access box so this profile will have read access only.
    III. If we checked edit access so this profile will have edit access only.
- Here we are taking example of Industry field in account object. We will give only read access of industry field to this profile.



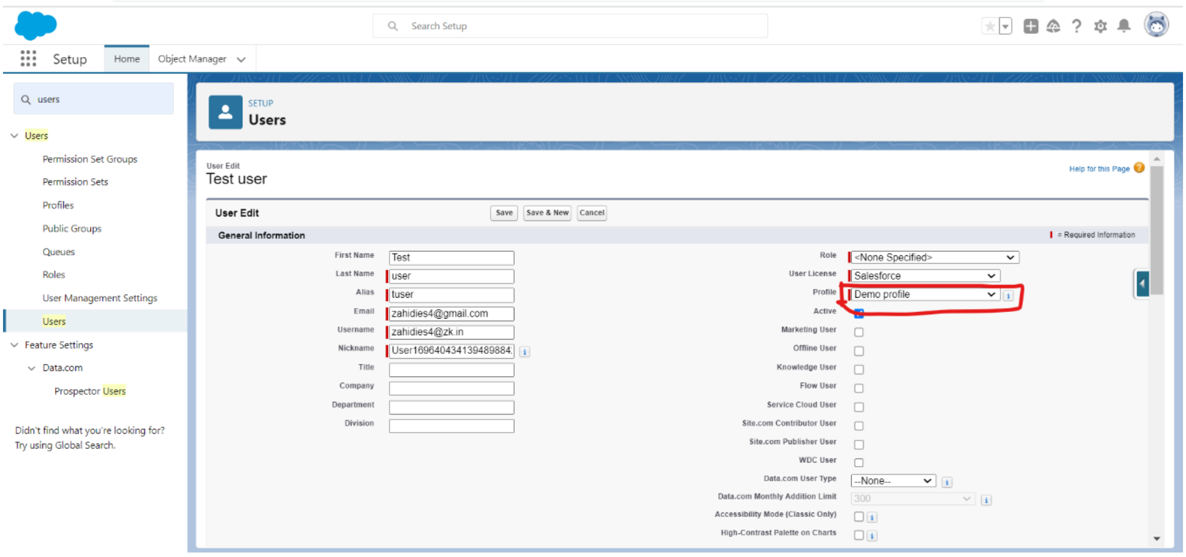
- Now click on save. Now what we made change will see here.



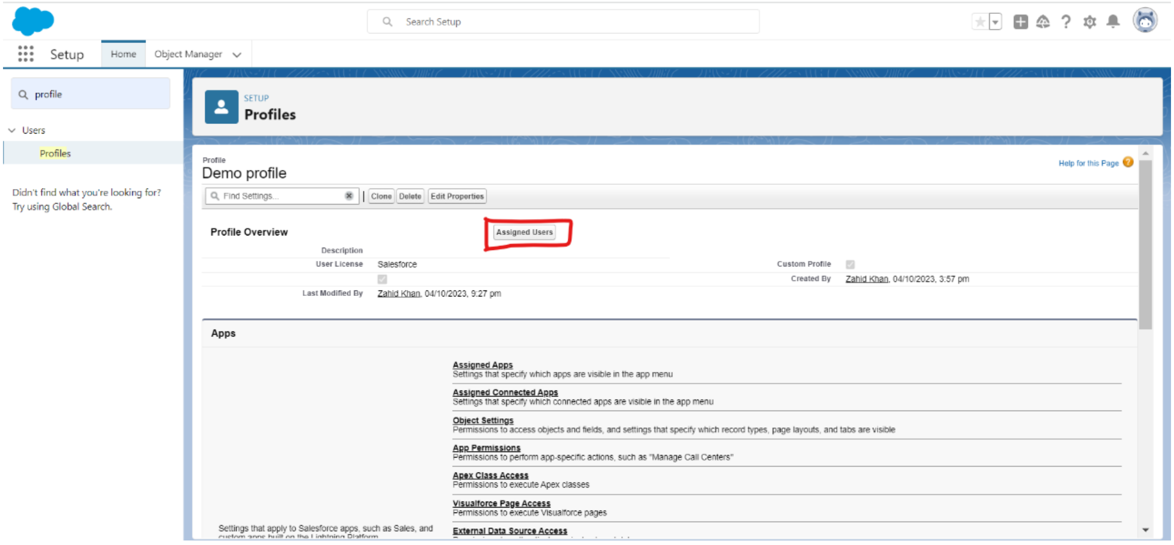
- Now we are going to assign this demo profile to already created users i.e., test user.
- Again, search for users in quick search box. And click on it.
- After that click on edit on beside Test user name.



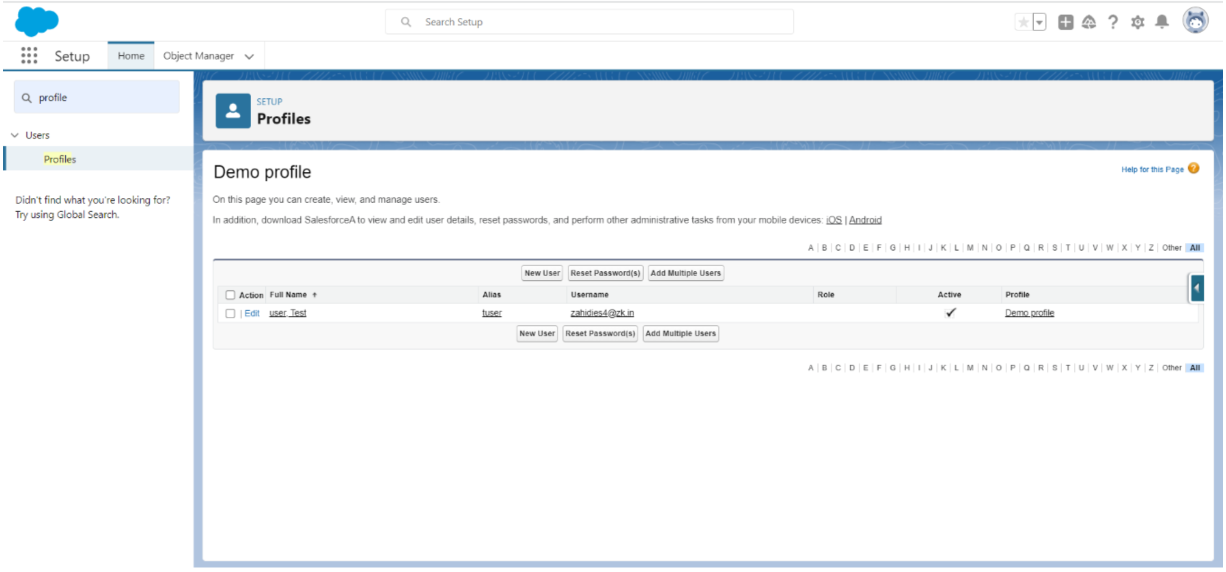
- After that select demo profile in Profile section. And click on save.



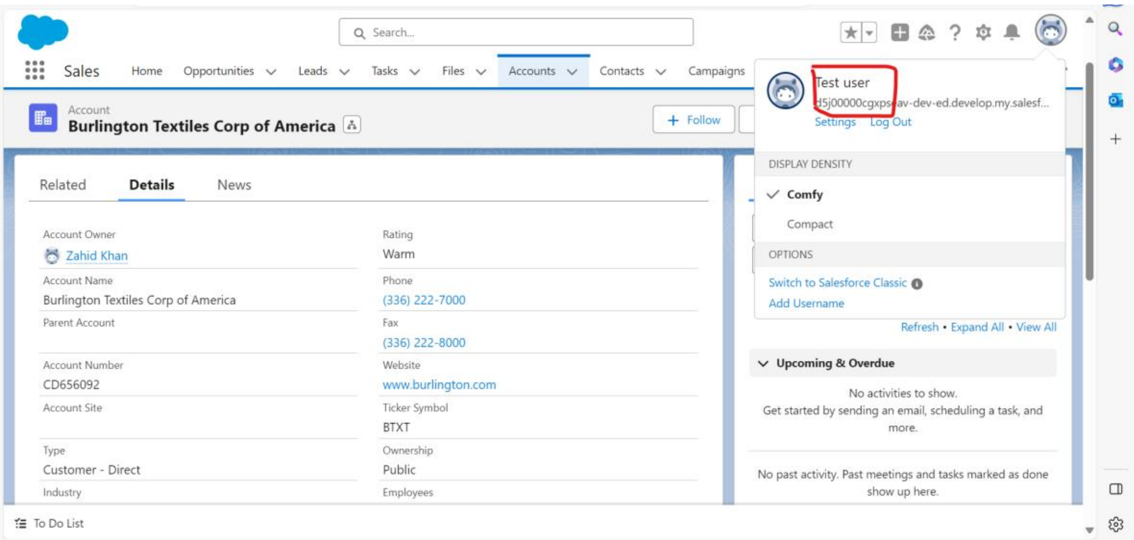
- Now demo profile is assigned to the test user and all the permissions set in that profile is apply on test user.
- We can also check in assigned user list of demo profile. For this, search for profile in quick search and click on it.
- After that find demo profile and click on it.
- After that click on assigned users.



- after that we will see all the assigned user of this profile.



- Now go to another browser and login for test user using username and password.
- After that go to account objects in sales sab see the access what we set in demo profile.
- Open any records to see the changes.



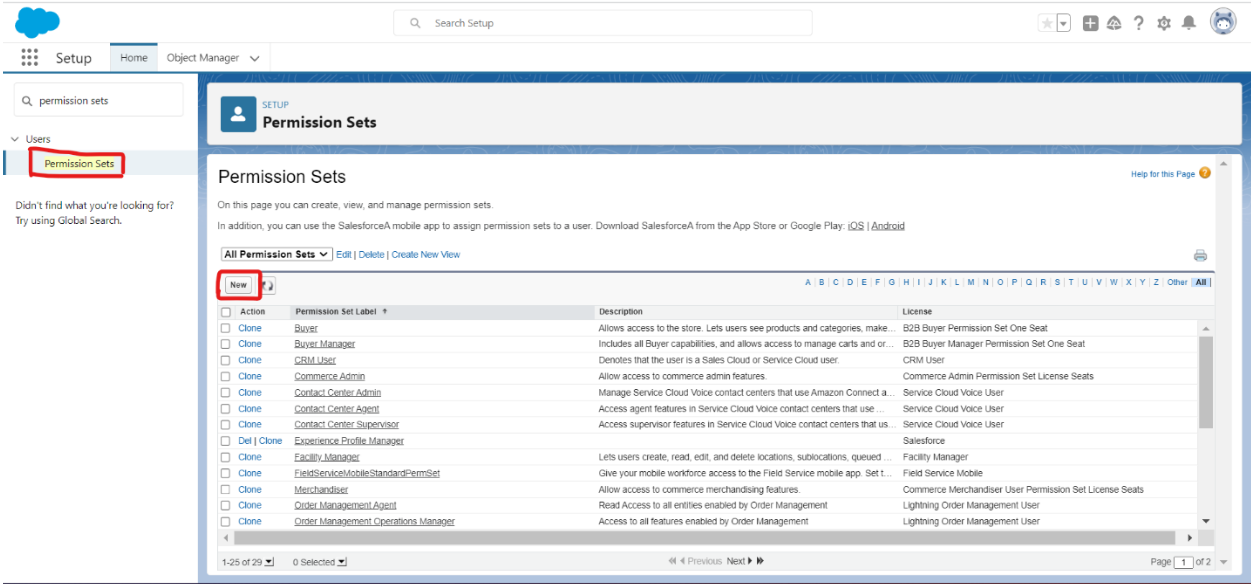
- Here we can see that edit button(pencil) is not visible because we disable this for test user.

Permission sets

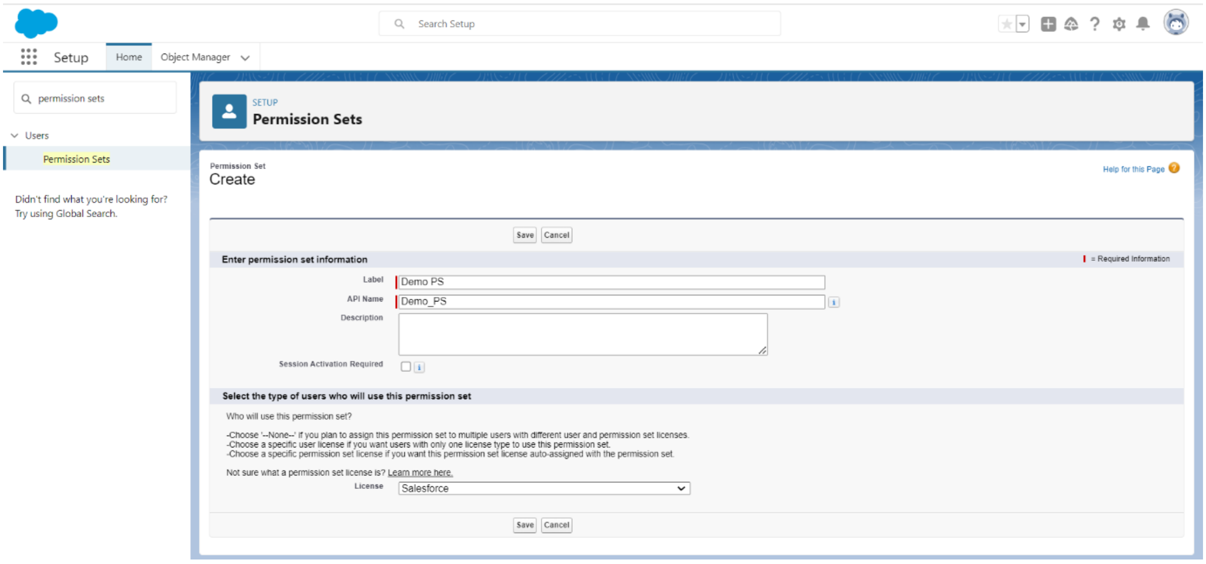
- When we have a requirement that we have 2 users. Users A and users B, we want to give read and create access to user A. we want to give edit and delete access to user B. for this scenario we can create 2 different profiles, but this approach is not good. for this type of scenario, we have to use **permission sets**.
- A permission set is a collection of settings and permissions that give user access to various tools and functions.
- Permissions sets extend users functional access without changing their profile.
- Through permissions sets permission can be granted and any time it can be taken away as well.
- Users can have only one profile, but they can have multiple permission sets assigned.

Steps to create permission sets:

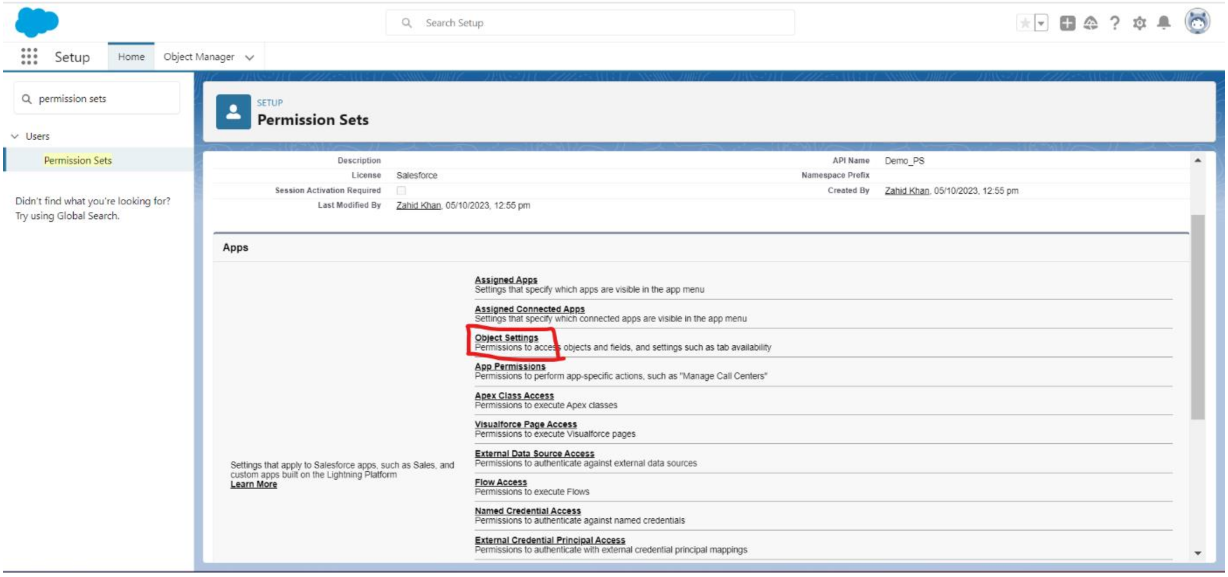
- Go to set-up and search for **permissions set** in Quick search box. And click on it.
- In permission set we don't have to clone like profile. We can create new permissions set by clicking on new button.



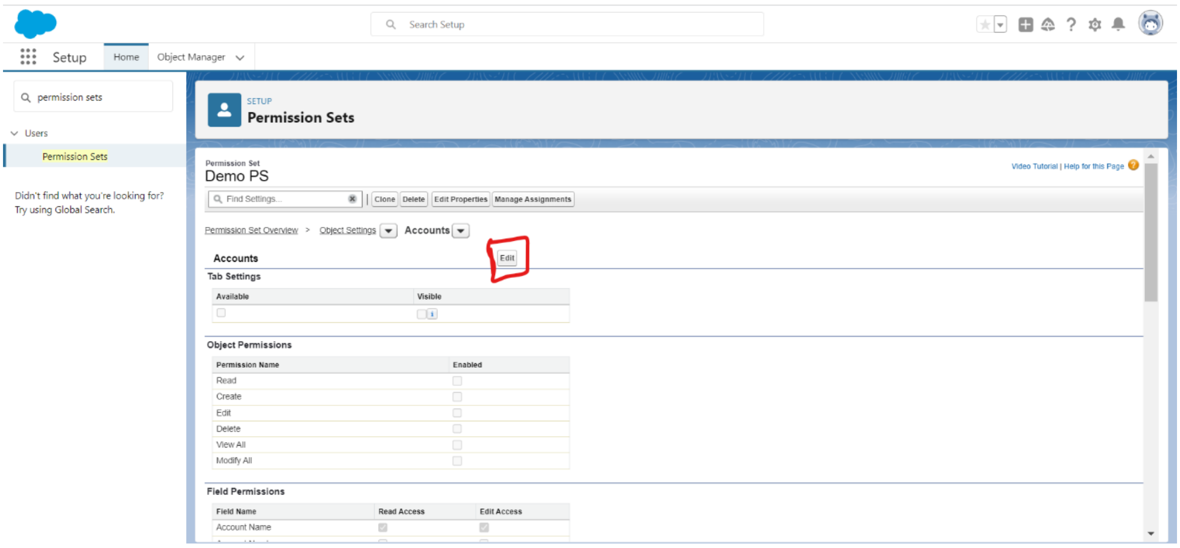
- After that enter label, Api name will be automatically filed and choose license as salesforce. And click on save.



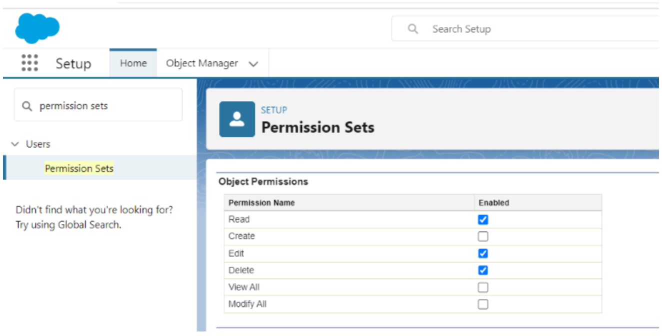
- Permission set will be adding the permissions. We can't revoke permissions through permissions set.
- After creating permissions set can edit access of any object and fields.
- Here, we are editing object Settings. So, click on object settings.

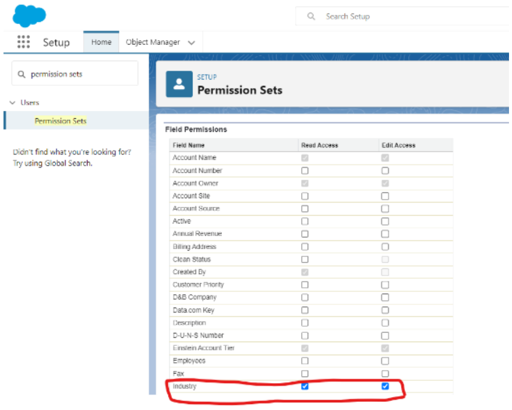


- after that we can see that whole objects of org. but don’t have any access of any object. So, we have to edit the access of the object. For example, we are taking **account object**.
- Click on Account object. After that click on edit button.

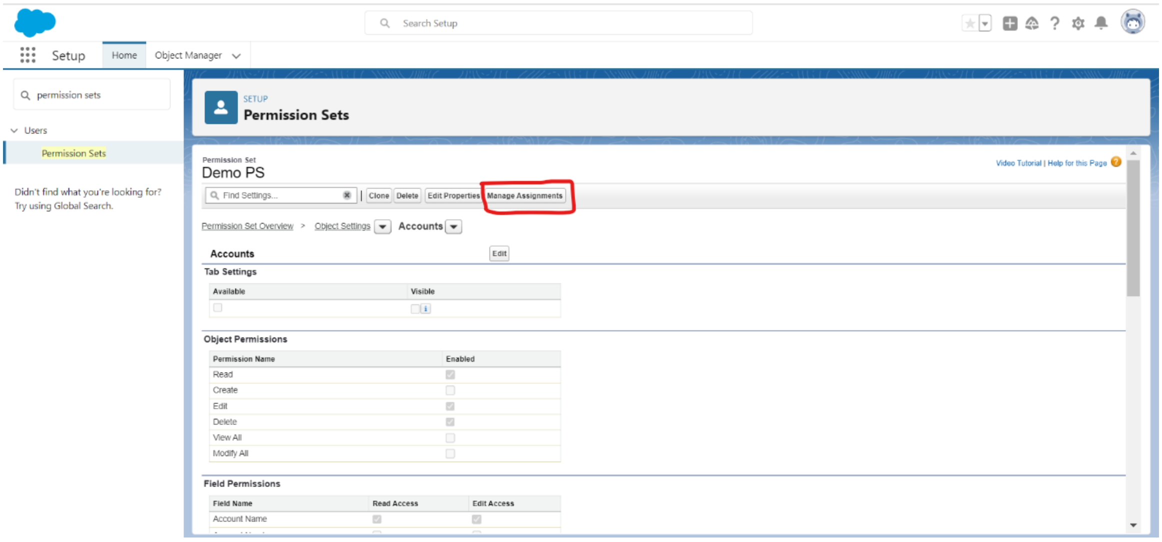


- Here, we can enable read, write, create, and delete access on account object and we can also give read and edit access of any field.
- If any box is checked in profile but unchecked in permission sets so that user have the access to that check box in profile. It can’t be revoked.
- We are checked the box of read, edit, and delete. And create box will be unchecked because it already checked in profile. In permissions sets we do any add-on of the permissions.
- In field permissions, we are giving edit and read access to these permissions to industry field. In profile, we didn’t give read and edit access of the industry field. So when we give access from permission set the user get the access.

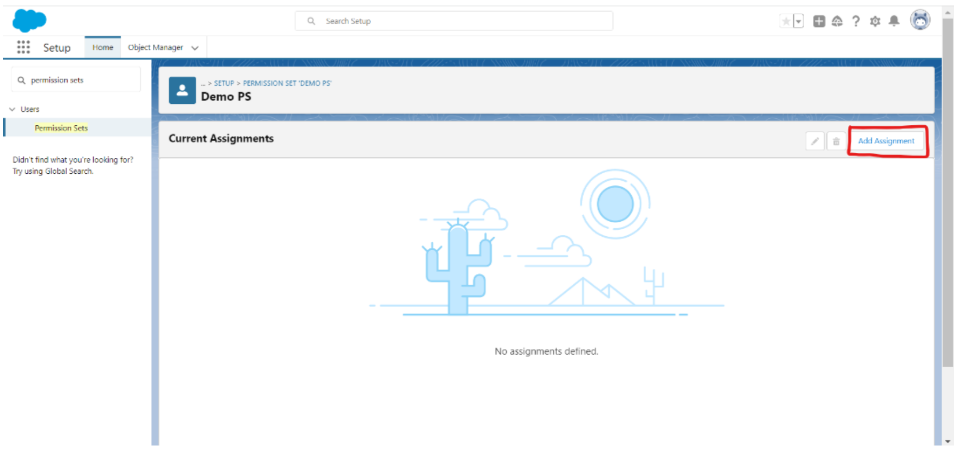




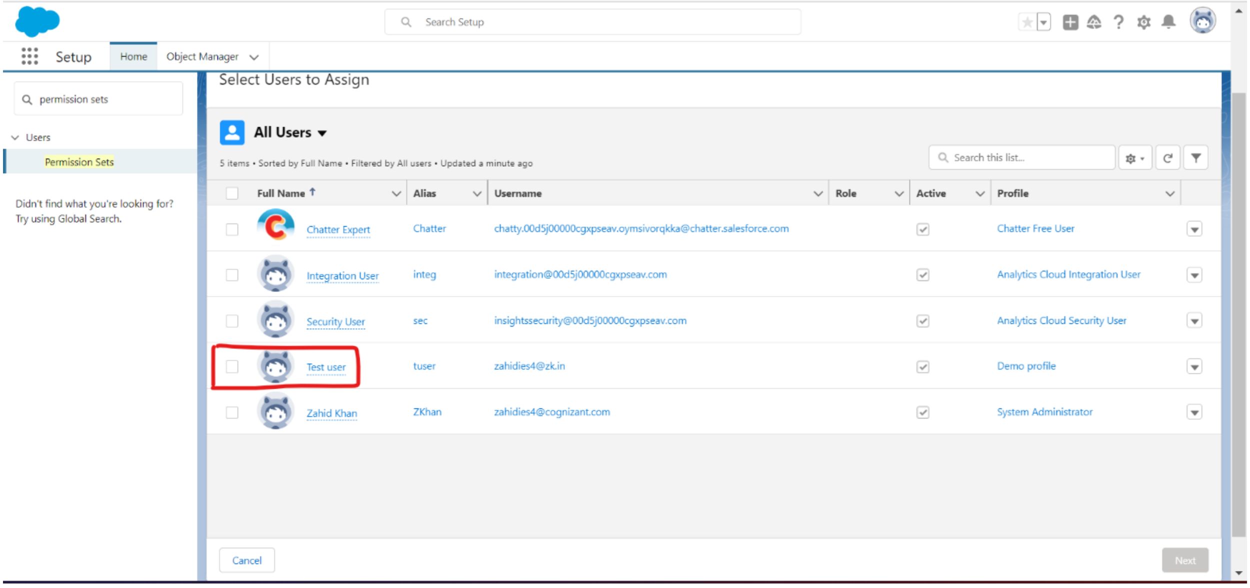
- After that click on save.
- Now we are assigning this permission set to test user. For this we can assign this permission set using 2 ways 1st like we assign profile to user. And 2nd just click on manage assignment.



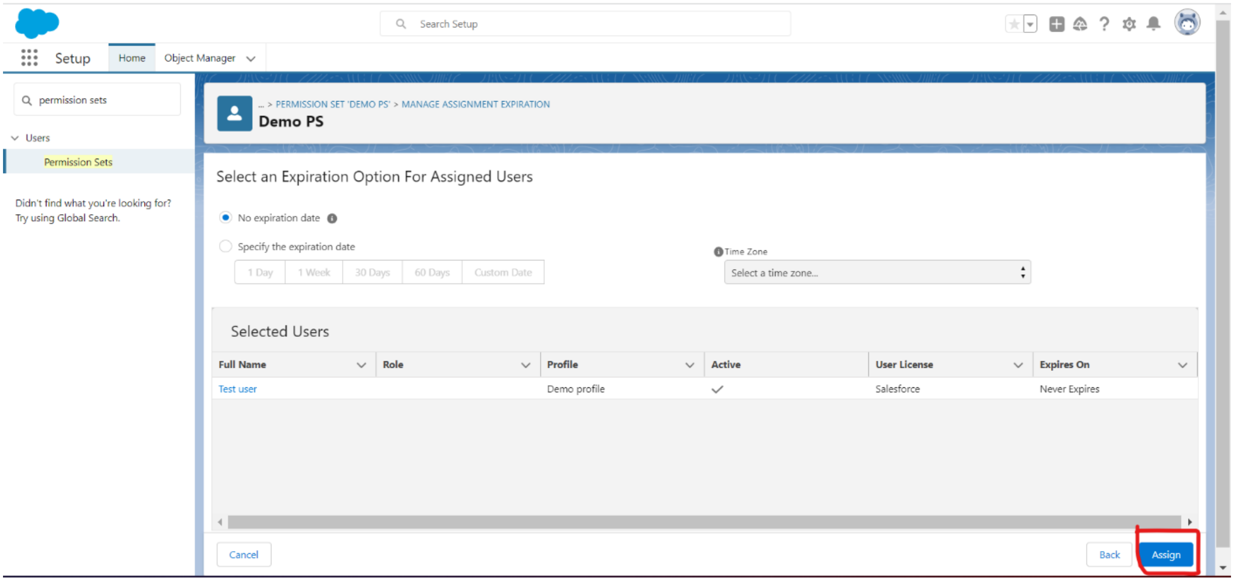
- After that click on Add assignment.



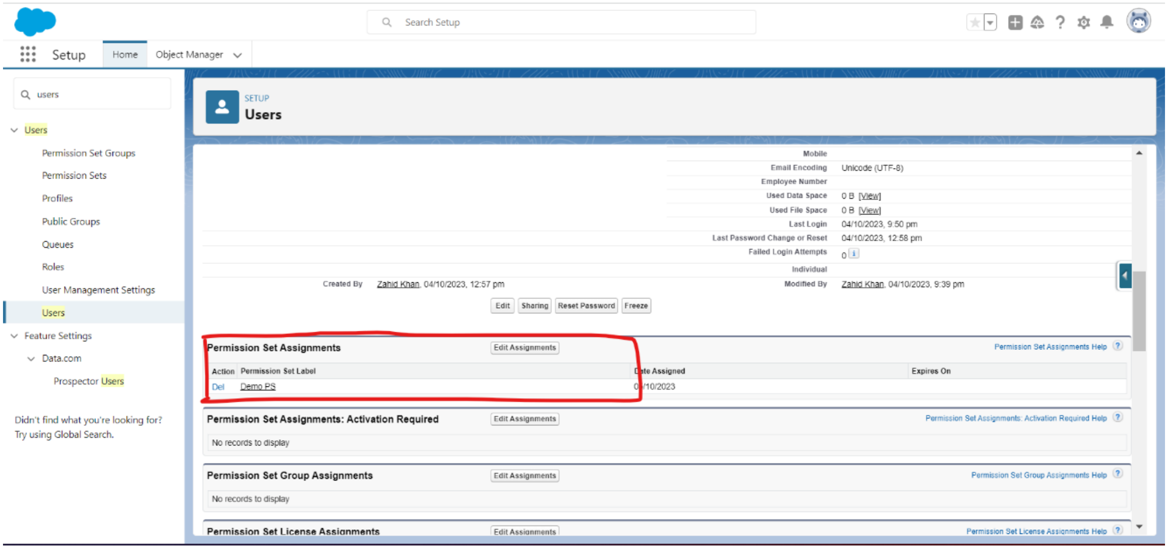
- After that we will see the All-user name. we can select according to our requirements. For example, we are selecting test user.



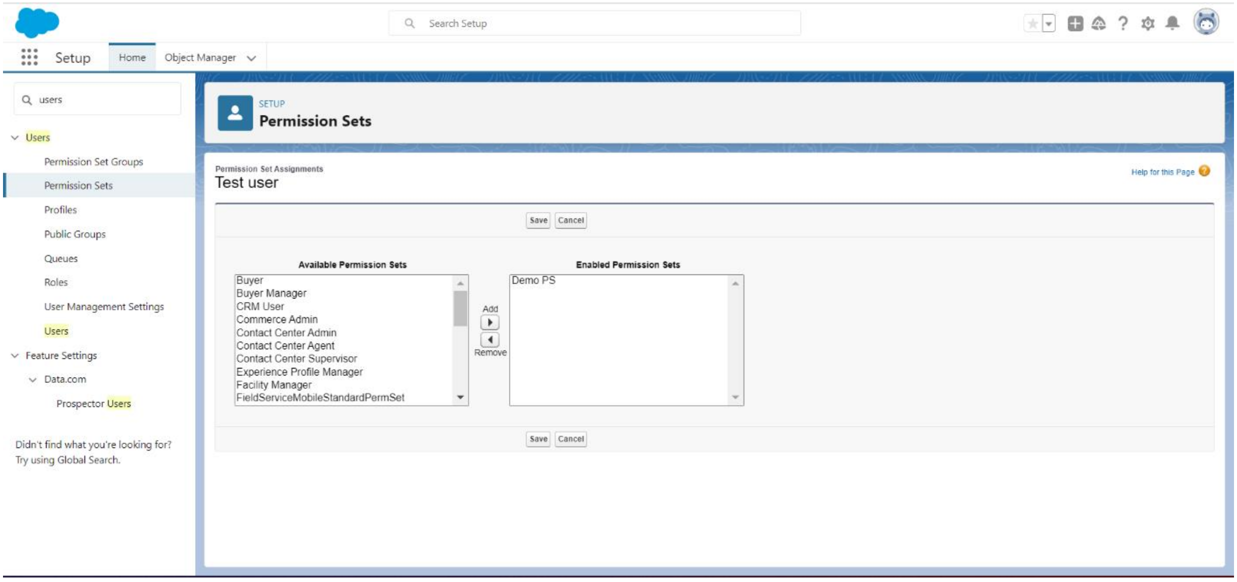
- Now select the test user and click on next.
- We can give expiration date and time date.
- Now click on assign. And click on done.



- Now search for users in quick box. Click on Test user. After that scroll down we will see demo PS in permission set assignment.

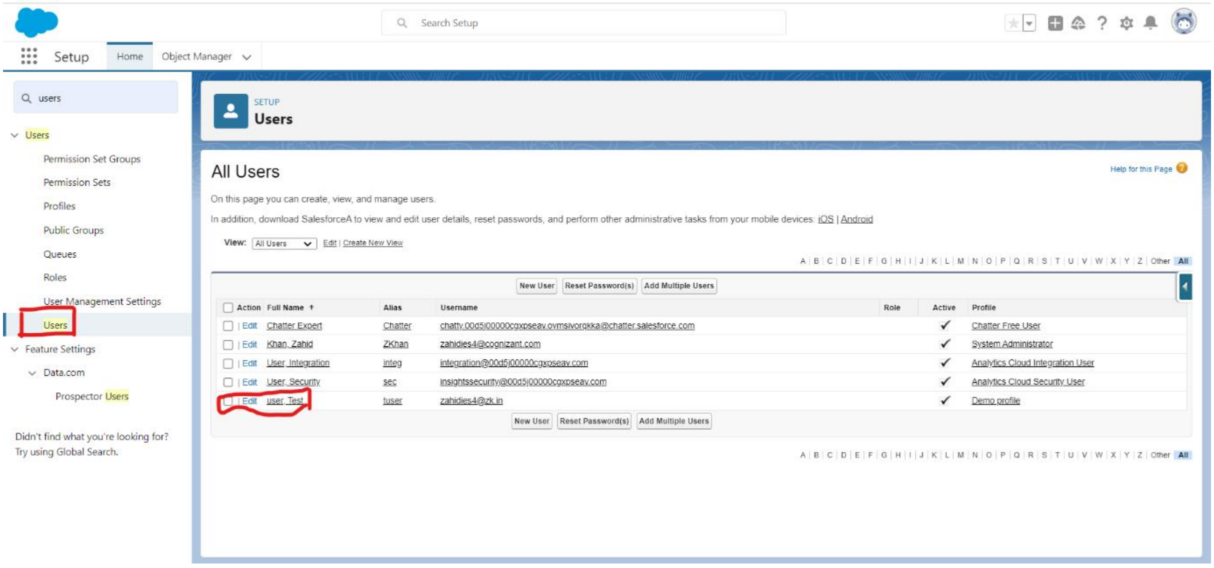


- If we want to add another permission set to this user, then click on Edit assignment and select the permissions set and click on add button. And click on save. So that permissions set will be add on that user.

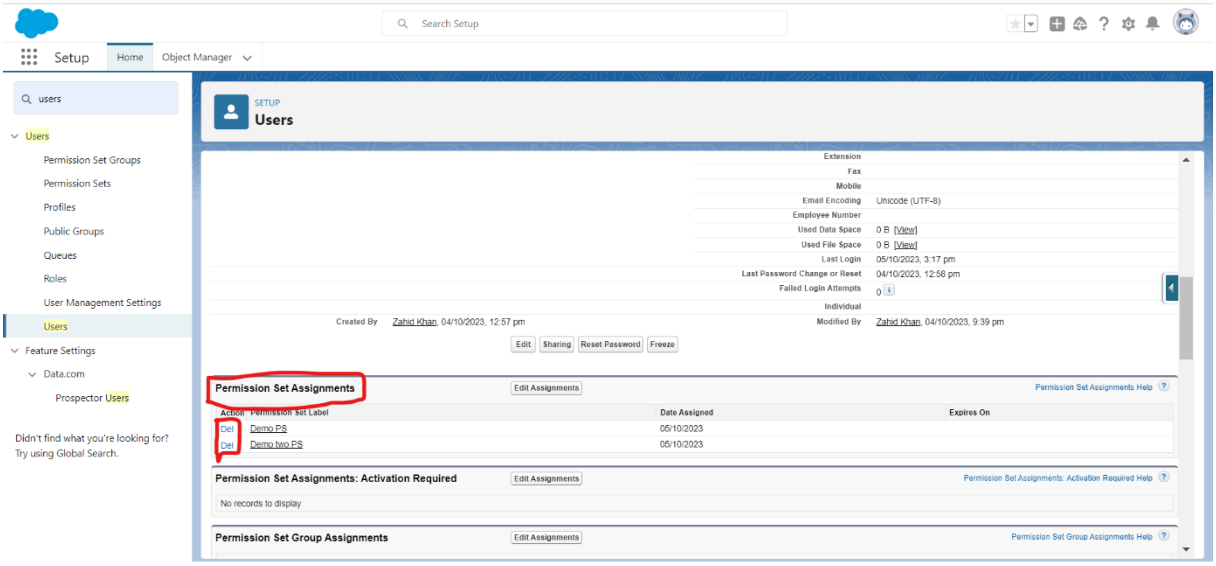


<u>Steps to delete permission set from any user:</u>

- We can delete the permission set from any users from **User**.
- To do this search for user in quick search and click on it. After that click on the user from which permission set need to be delete. Here, we are selecting test user because we have only user in free license.



- After that scroll down we will get permission set assignment. Beside permission set name there is a del option just click on this.



- After clicking on del that permission set will be deleted from that user.