

# 1.Create a Master-Detail Relationship between two Custom objects and also create a Roll Up Summary Field to Calculate total number of records.

## Solution:

### Step 1: Create Custom Objects

Assuming you have two custom objects, let's call them "College\_C" and "C Department\_C". If you haven't already created these objects, you can do so by going to Setup > Object Manager > Create > Custom Object.

The screenshot shows the 'New Custom Object' configuration page in Salesforce. The page is titled 'New Custom Object' and includes a navigation bar with 'Setup', 'Home', and 'Object Manager'. The main content area is divided into several sections:

- Custom Object Definition Rule:** Includes a 'Custom Object Information' section with fields for 'Label' (College\_C), 'Plural Label' (Colleges), 'Name with word plural' (Colleges), 'Object Name' (College\_C), and 'Plural Name' (Colleges). There is also a 'Description' field and a checkbox for 'Create this object in Lightning Experience & Lightning mobile'.
- Enter Record Name Label and Format:** Includes a 'Record Name' field (College Name) and a 'Name Type' dropdown (Full).
- Optional Features:** Includes checkboxes for 'Allow Reports', 'Allow Analytics', 'Track Field History', and 'Allow in Custom Objects'.
- Object Classification:** Includes checkboxes for 'Allow Sharing', 'Allow Field API Access', and 'Allow Streaming API Access'.
- Deployment Status:** Includes a 'Deployed Status' section with a 'Deploy' button and a 'Status' dropdown (Deployed).
- Search Status:** Includes a 'Search Status' section with a 'Search' button and a 'Status' dropdown (Searchable).
- Object Creation Options:** Includes checkboxes for 'Allow Bulk API Access' and 'Allow Streaming API Access'.

Second custom objects, let's call them "Department\_C"



Setup

Home

Object Manager

Search Setup



Object Manager

## New Custom Object

[Help for this page](#)

Permissions for this object are disabled for all profiles by default. You can enable object permissions to determine which of the existing custom profiles have access to this object. [View Object Permissions](#) [Edit Object Permissions](#)

## Custom Object Definition Rule

[Save](#) [Go to New](#) [Cancel](#)

## Custom Object Information

[Show Details](#)

The object definition rules are used to map object fields and objects.

Field:  Example: account  
Parent field:  Example: account  
Name with record type:

The object type is used when referencing the object in the API.

Object Name:  Example: account

Description:

Custom Description Label: ☒ Label the object in descriptions (available in Training section)  
☐ Label in address entry or available in page

Custom Name:

## Enter Record Name Label and Format

The record label appears in object details. You can control how labels and record details are displayed. For example, you can control how labels are displayed in record labels, record labels, and record labels. You can also control how labels are displayed in record labels, record labels, and record labels. You can also control how labels are displayed in record labels, record labels, and record labels.

Record Name:  Example: Account Name

Record Type:

## Optional Features

- ☐ Label Record
- ☐ Label Record
- ☐ Label Record
- ☐ Label Record
- ☐ Label Record

## Object Classification

When these settings are enabled, the object is classified as a Training section object. When these settings are disabled, the object is classified as a Training section object. When these settings are disabled, the object is classified as a Training section object.

- ☒ Label Record
- ☒ Label Record
- ☒ Label Record

## Deployment Status

[Show Details](#)

- ☐ In Development
- ☒ Published

## Search Status

When this setting is enabled, permissions are determined by the object type when they search. [View Details](#)

- ☐ Label Record

## Object Creation Options (Available only when custom object is first created)

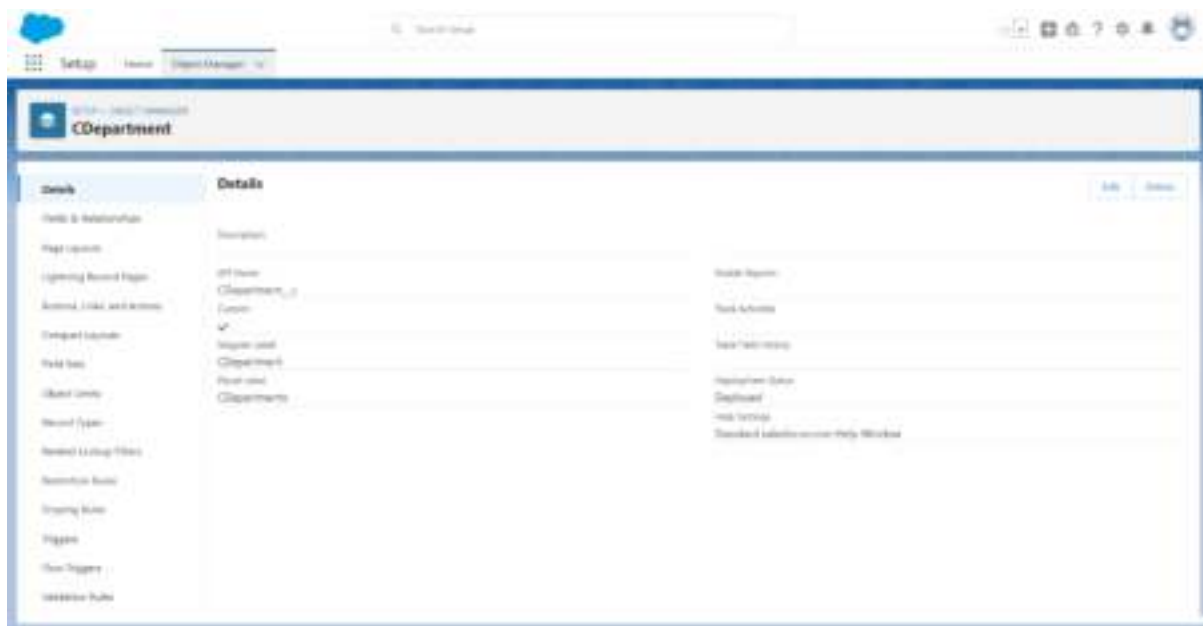
- ☐ Label Record (Available only when custom object is first created)
- ☐ Label Record (Available only when custom object is first created)

[Save](#) [Go to New](#) [Cancel](#)

## Step 2: Create a Master-Detail Relationship

To create a Master-Detail relationship between these two custom objects, follow these steps:

1. Go to Setup > Object Manager.
2. Click on "College\_\_c" to open its settings.
3. In the left sidebar, click on "Fields & Relationships."
4. Click the "New" button to create a new custom field.
5. Choose "Master-Detail Relationship" as the data type.
6. Enter a label for the relationship, e.g., "Department \_\_c."
7. Choose "Department\_\_c" as the related object.
8. Configure other settings as needed and click "Next."
9. Specify the field-level security and add it to relevant page layouts.
10. Click "Next" and "Save" to create the relationship.

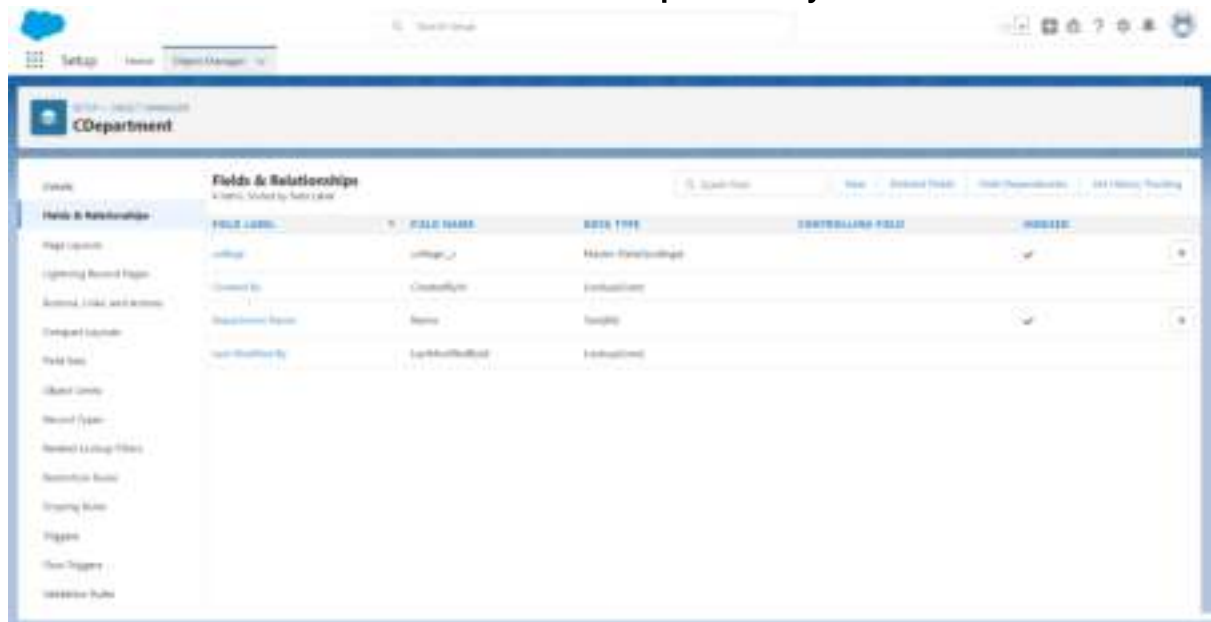




### Step 3: Create the Roll-Up Summary Field

Now, let's create a Roll-Up Summary Field on the "College\_C" to calculate the total number of related records in "Department\_\_C":

1. Still on the "College\_\_c" settings, go to "Fields & Relationships."
2. Click the "New" button to create a new custom field.
3. Choose "Roll-Up Summary" as the data type.
4. Enter a label for the field, e.g.,
5. Choose "Count" as the Roll-Up Type.
6. Select " Department\_\_c" as the object to roll up information from.
7. Specify the filter criteria if you want to filter the related records.
8. Configure other settings as needed and click "Next."
9. Specify the field-level security and add it to relevant page layouts.
10. Click "Next" and "Save" to create the Roll-Up Summary Field.











#### **Step 4: Create a Lightning App**

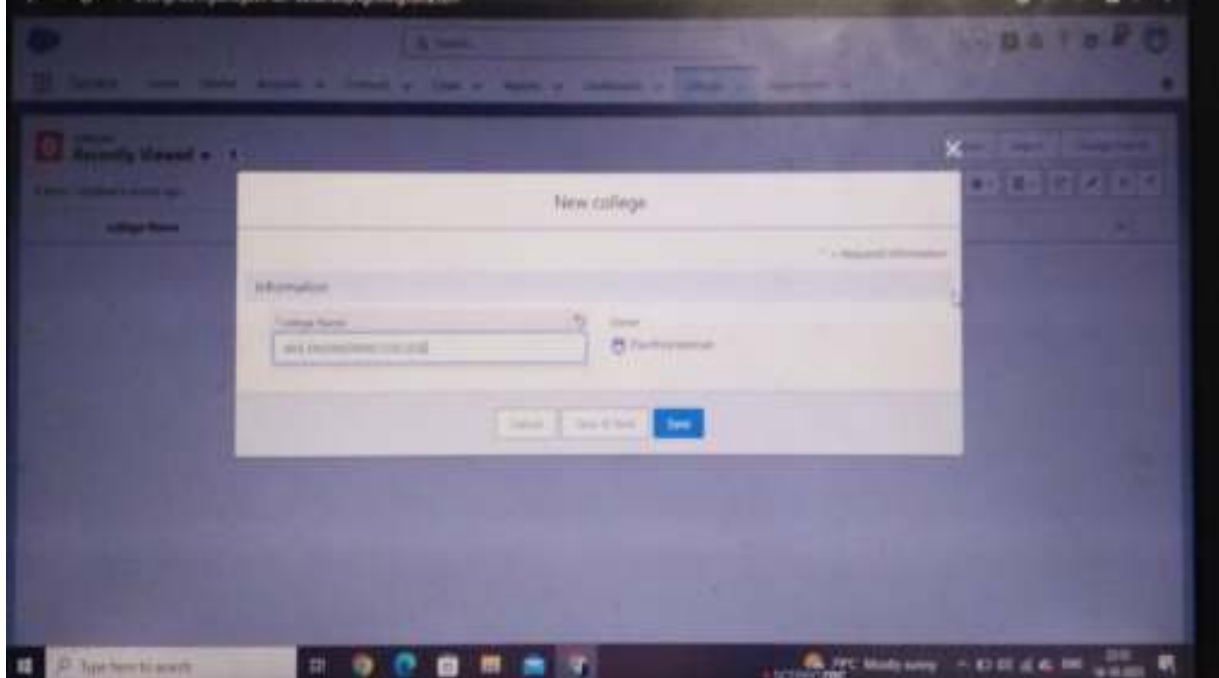
- 1. Type and select "App Manager."**
- 2. Click "New Lightning App."**
- 3. Fill in basic information (Name, Developer Name, Description).**
- 4. Choose the App Type (Standard, Console, Custom).**
- 5. Customize the Logo and Colour Scheme.**
- 6. Configure Navigation Items (objects to appear in the app's menu).**
- 7. Set the App Visibility (default access).**
- 8. Optionally, choose Record Pages (Lightning Record Pages).**
- 9. Review and Save the app.**
- 10. Assign the app to users or profiles.**
- 11. Test the app with the assigned users.**

[illegible]

The screenshot shows the Salesforce 'New Custom Object Tab' setup wizard. The left sidebar contains the 'Setup' menu and a search bar. The main content area is titled 'New Custom Object Tab' and includes a 'Step 1: Enter the Details' section. In this section, the 'Object' dropdown is set to 'Account' and the 'Tab Name' is 'Sales'. The 'Display in Mobile App' checkbox is checked. The 'Description' field is empty. The bottom right corner shows 'Next' and 'Cancel' buttons.



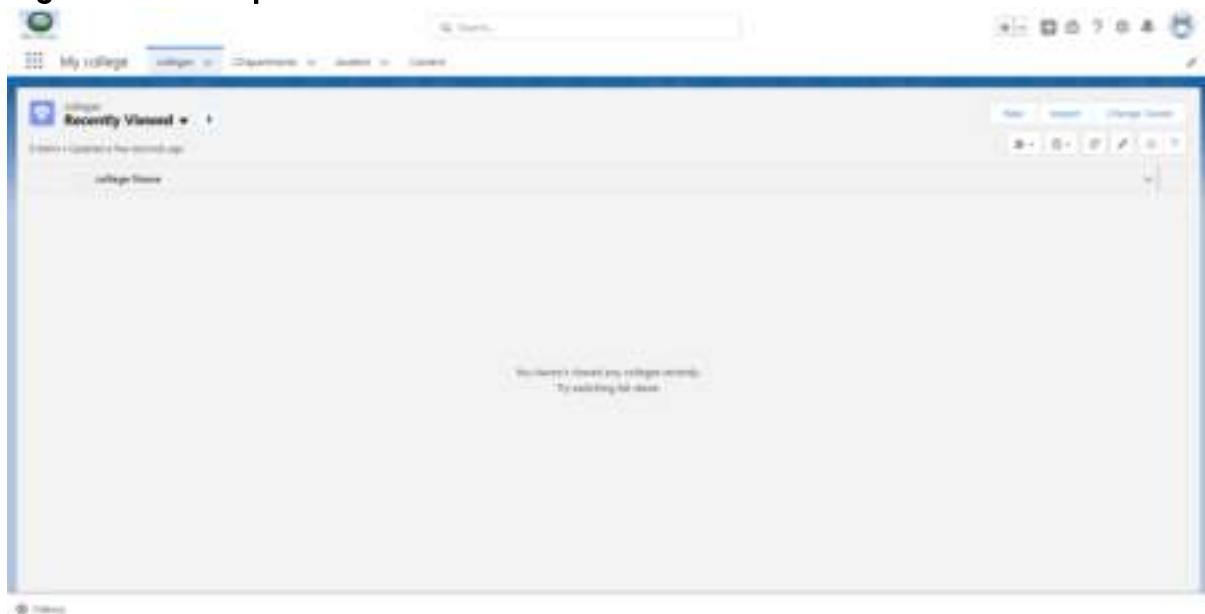




## Conclusion:

Now, whenever you create or update a record in the "Department\_\_c" related to a "College\_\_c," the "TotalCount\_\_c" field on the "College\_\_c" will automatically update to show the total number of related records.

Remember to adjust field-level security, validation rules, and page layouts as needed to ensure that your custom objects and fields are appropriately configured for your organization's requirements.



AVS ENGINEERING COLLEGE

Related Details

College Name	AVS ENGINEERING COLLEGE	Owner	Prathima Kumar
Department			
Created By	Prathima Kumar 11/16/2023 10:57 am	Last Modified By	Prathima Kumar 11/16/2023 11:02 am

My college

Departments

Recently Viewed

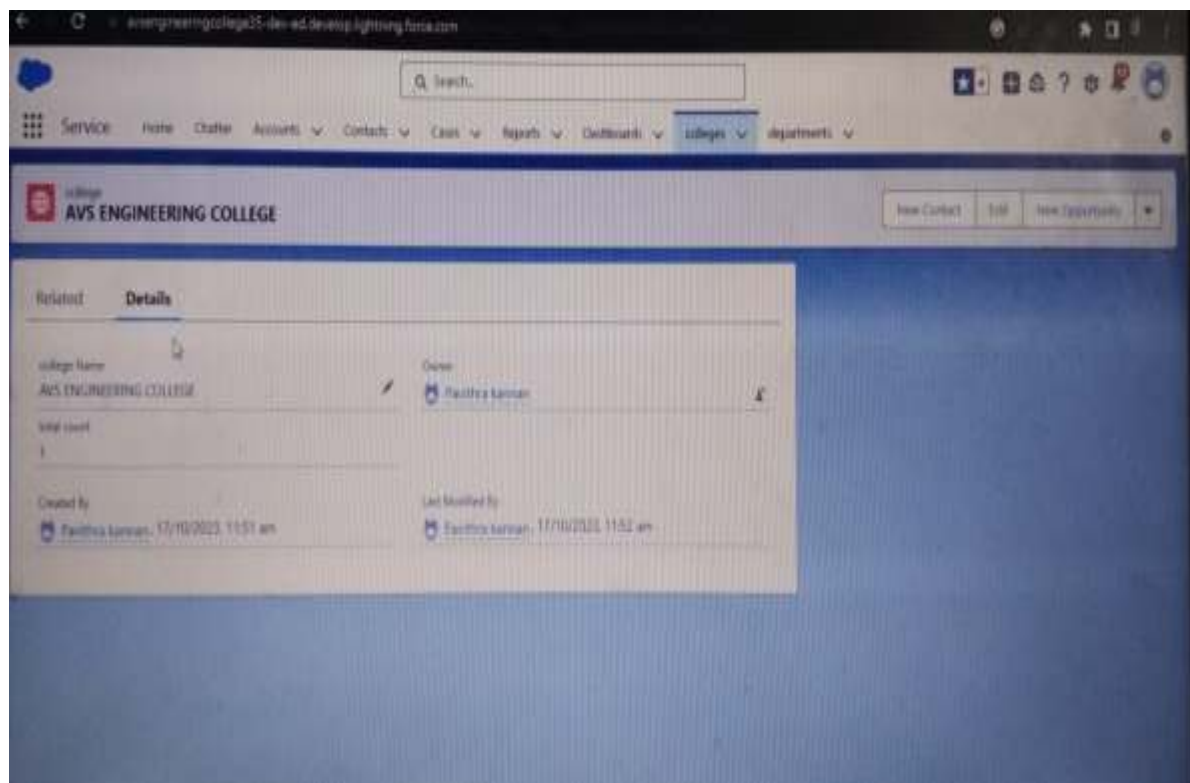
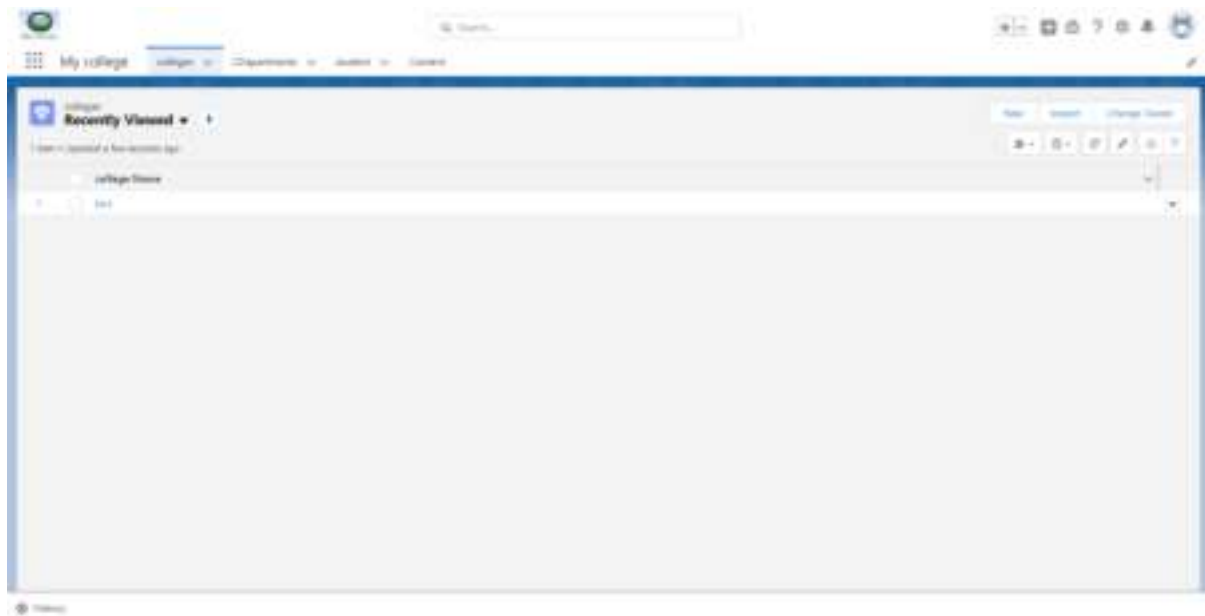
Department Name

My college

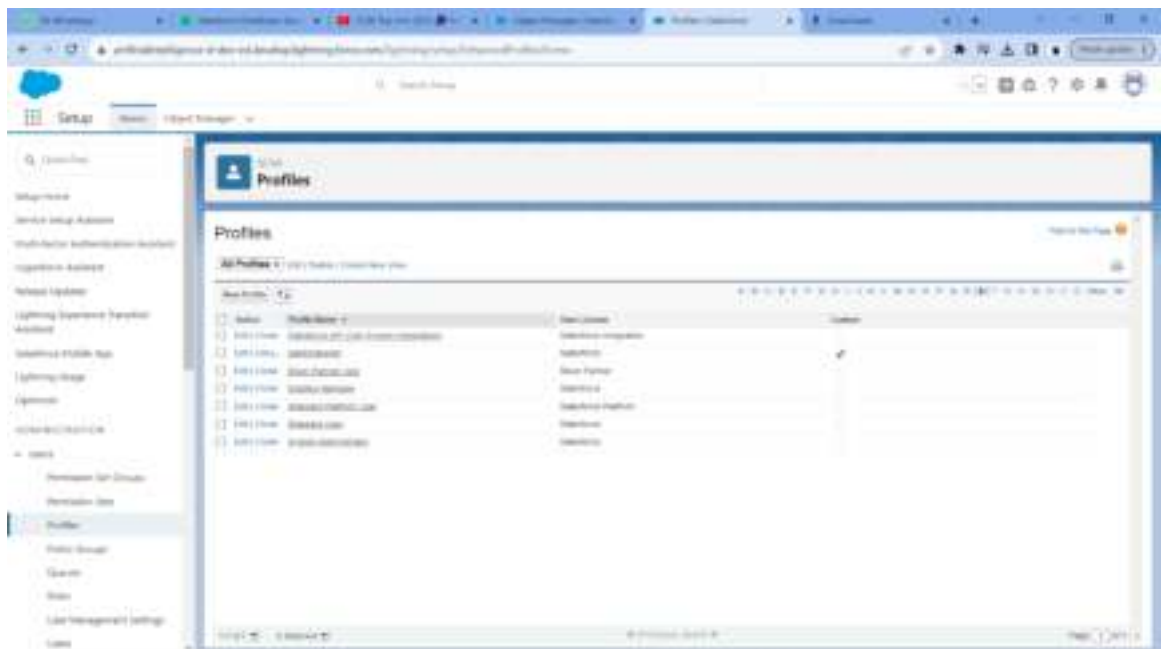
Departments

Recently Viewed

Department Name



**Solution:**

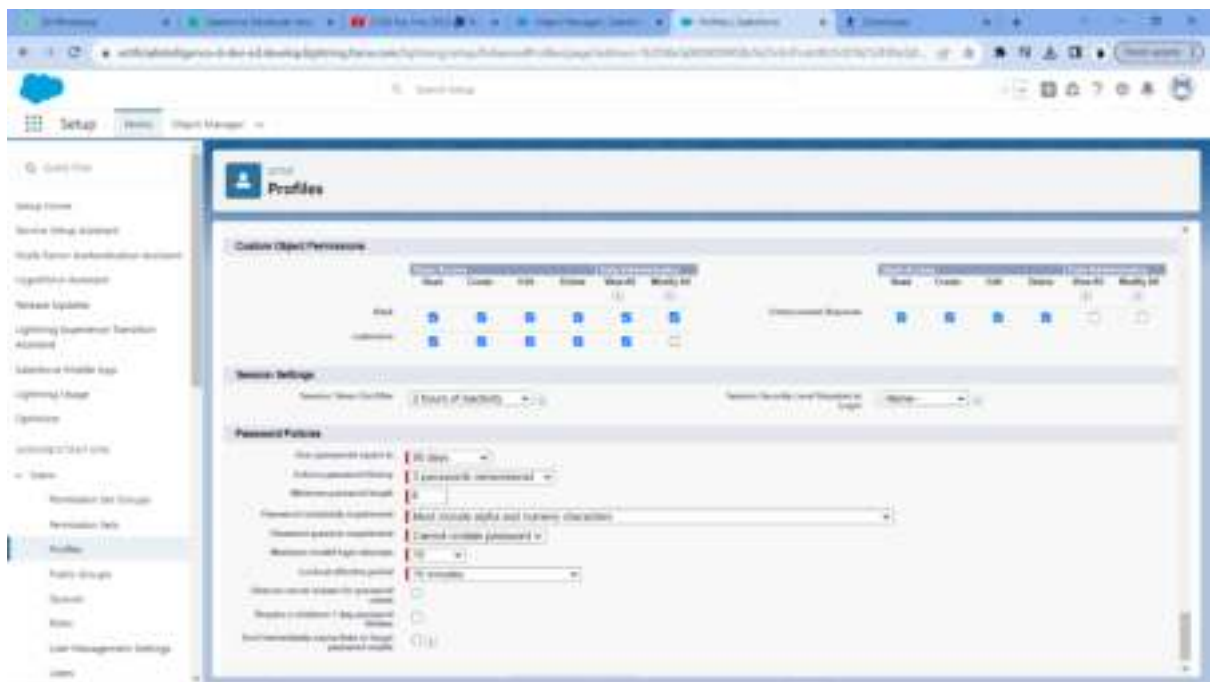
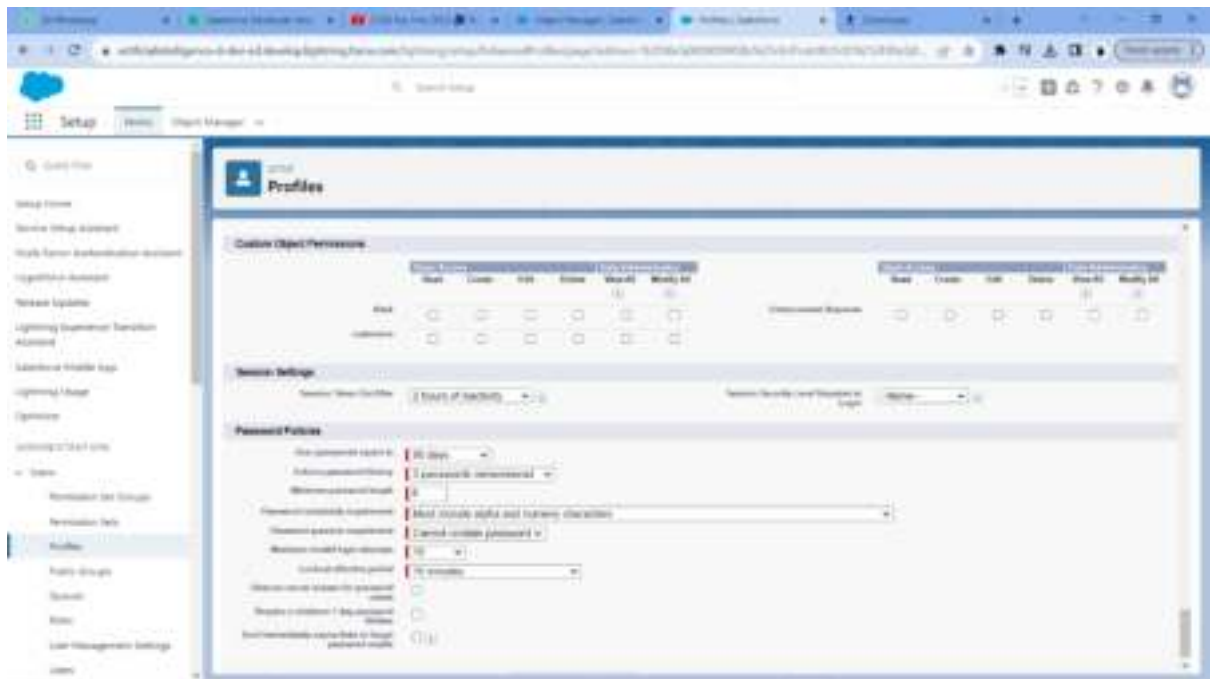
[illegible]









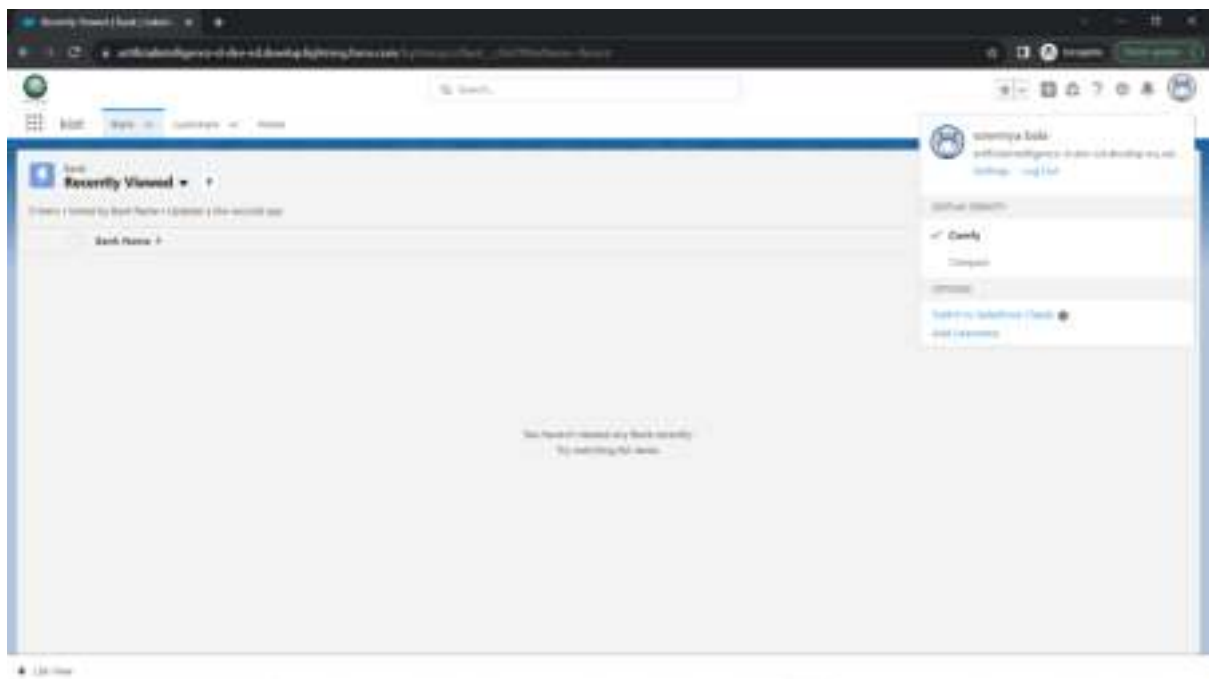
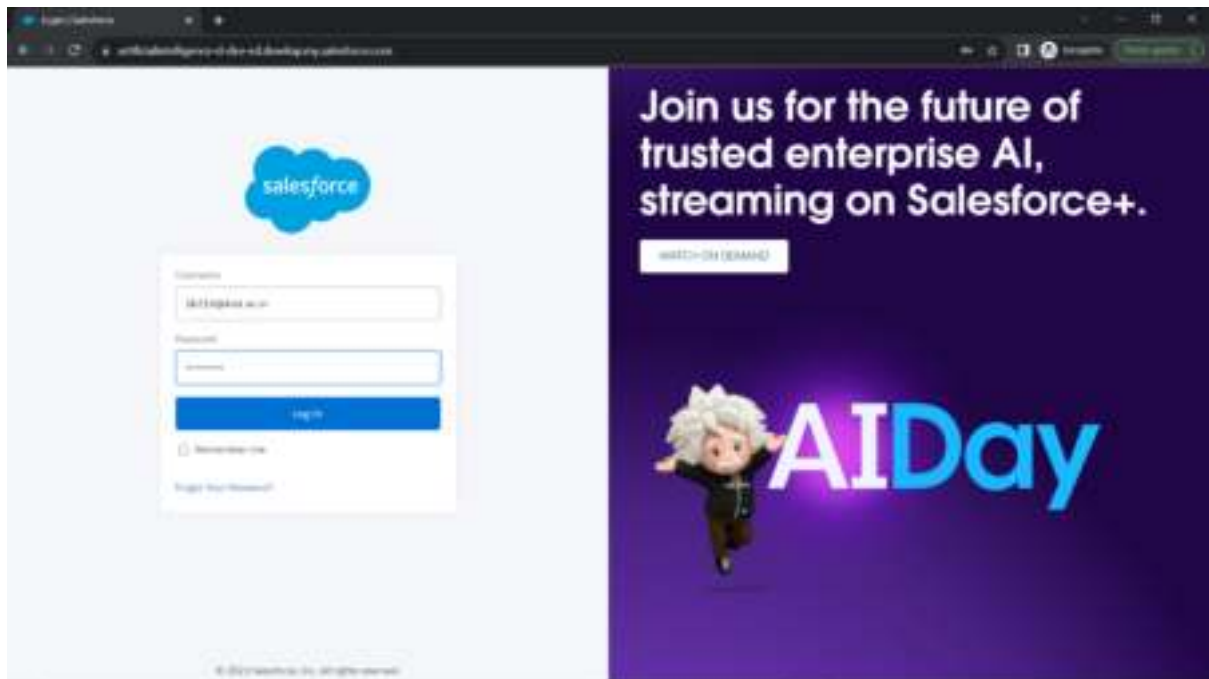








[illegible]





New Bank

Recently Viewed

Information

Bank Name

City

Country

00000000000000000000

Account Type

Current

Cancel Save & Return Save

New Customer

Recently Viewed

Information

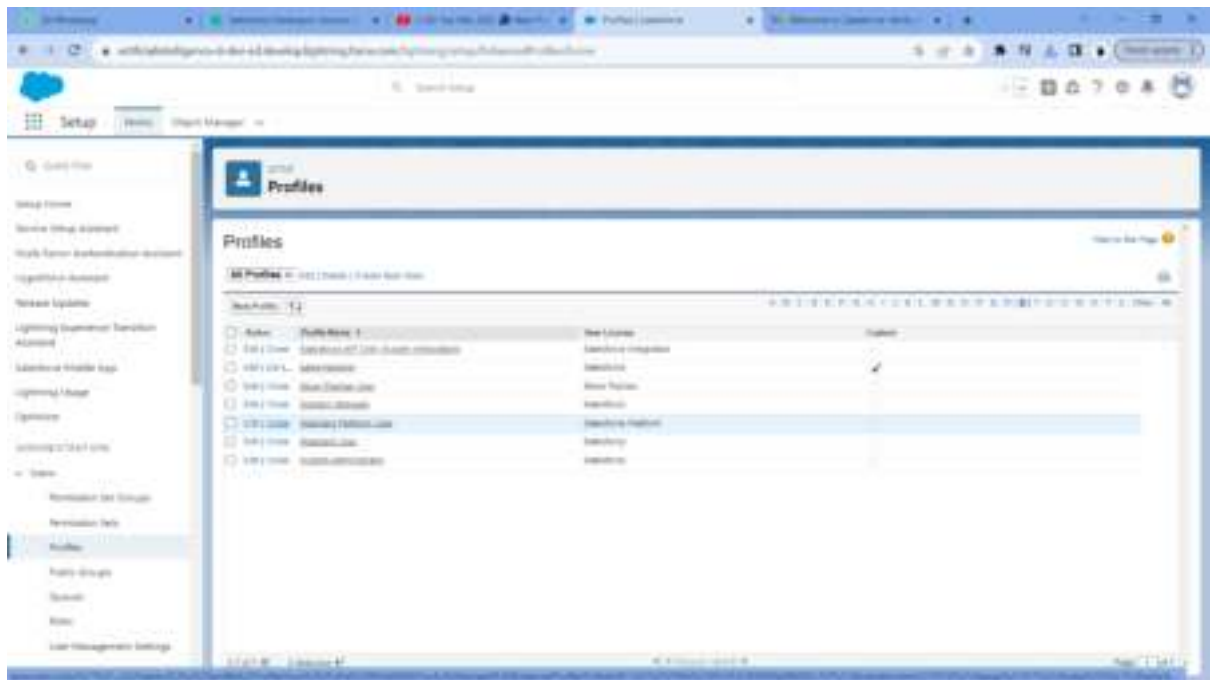
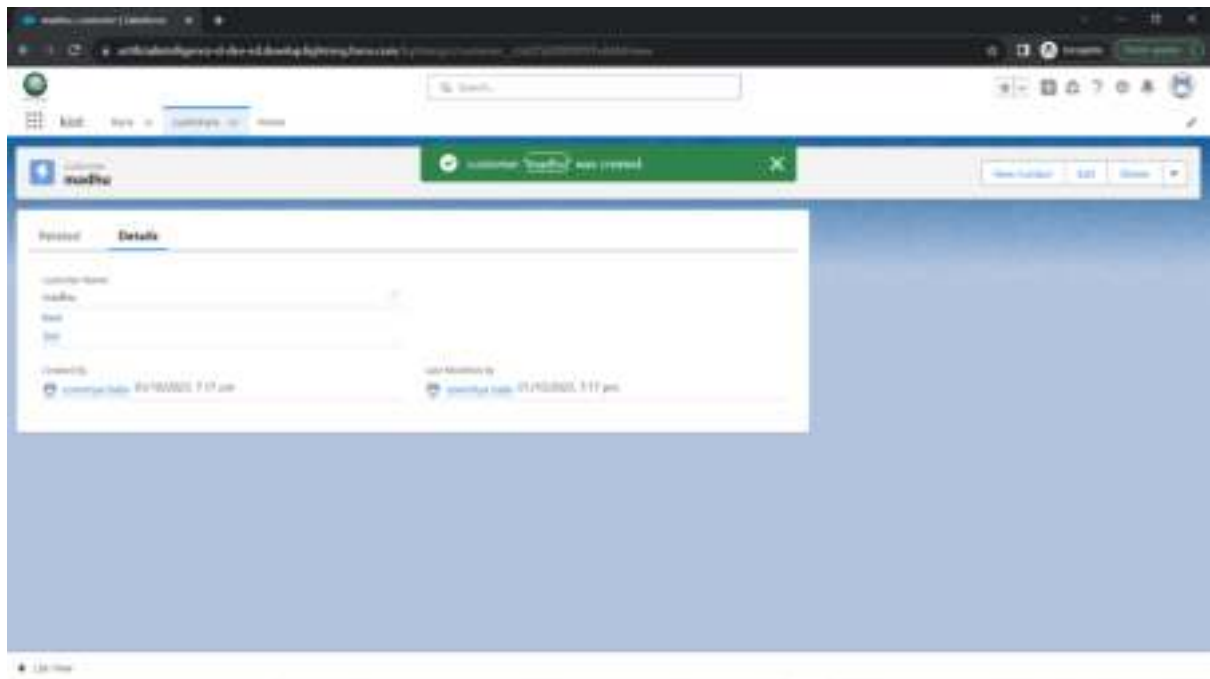
Customer Name

Mobile

Gender

Mr

Cancel Save & Return Save



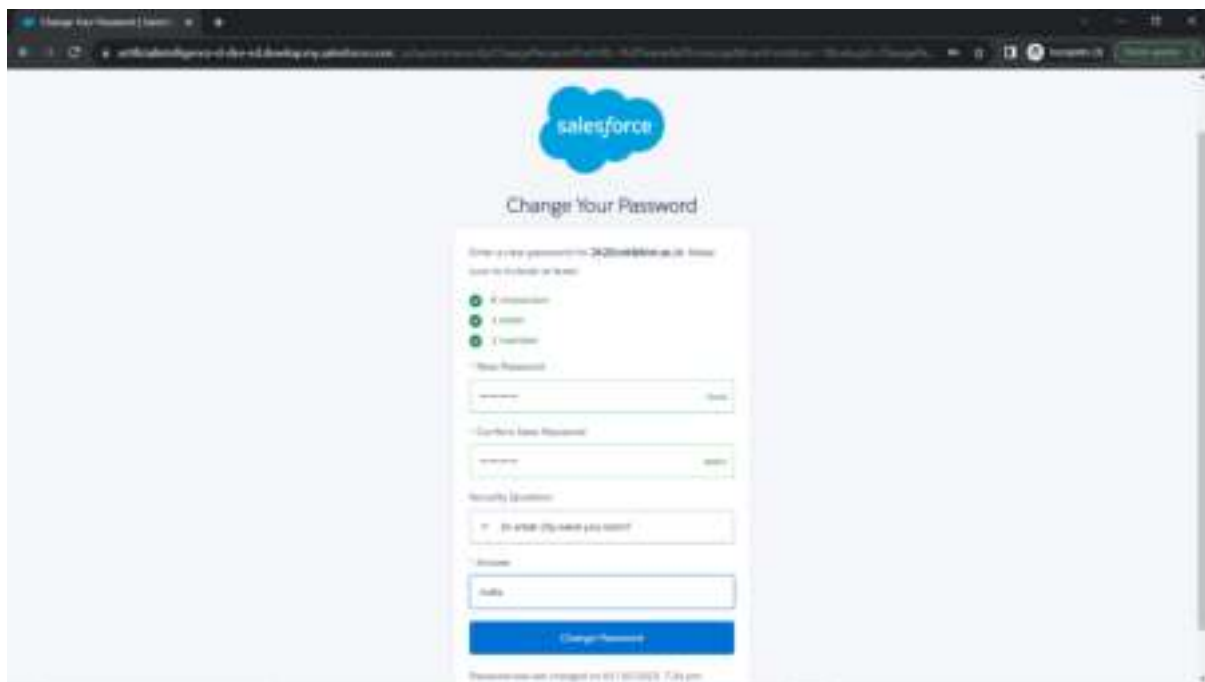
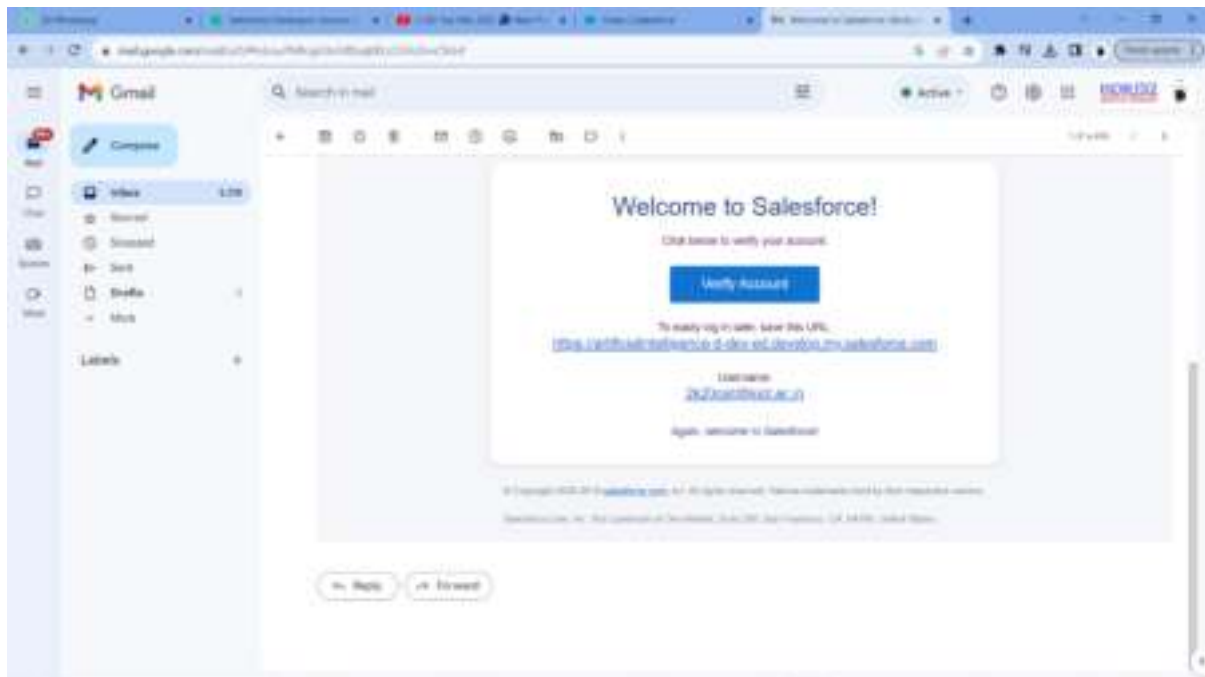




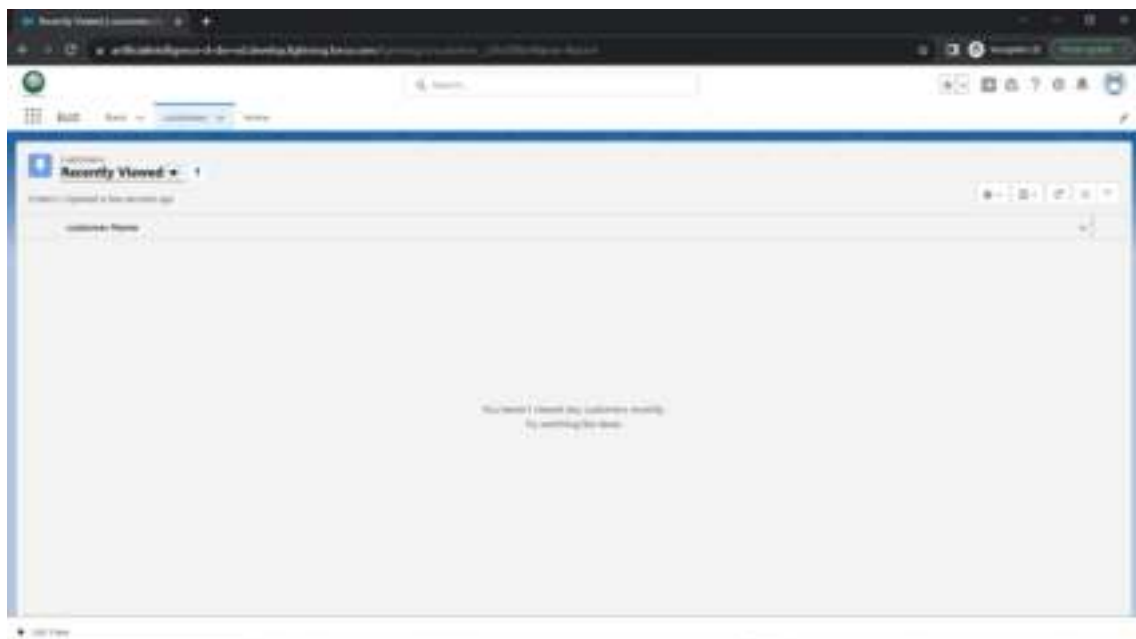
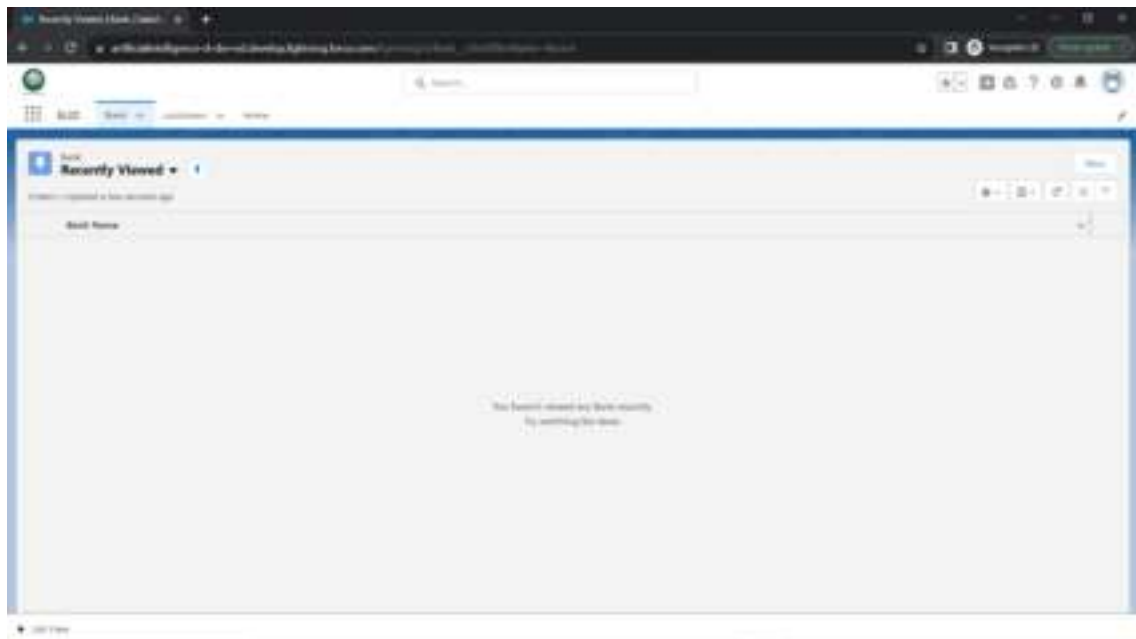














## Step 2:

### Permission Sets:

- Create two permission sets, one for User A and one for User B.

### Object-Level Security:

- In each profile and permission set, set the object-level security for the Account object to

"Read" to ensure that both I-Jser A and I-Jser B can view Account records.

### Record-Level Security:

- Implement record-level security using Criteria-Based Sharing Rules.
- Create a sharing rule that shares Account records owned by User A with User A and records owned by IJser B with user B.
- For the sharing rule criteria, specify that records owned by User A are shared with user

A, and records owned by User B are shared with User B.

### Ownership:

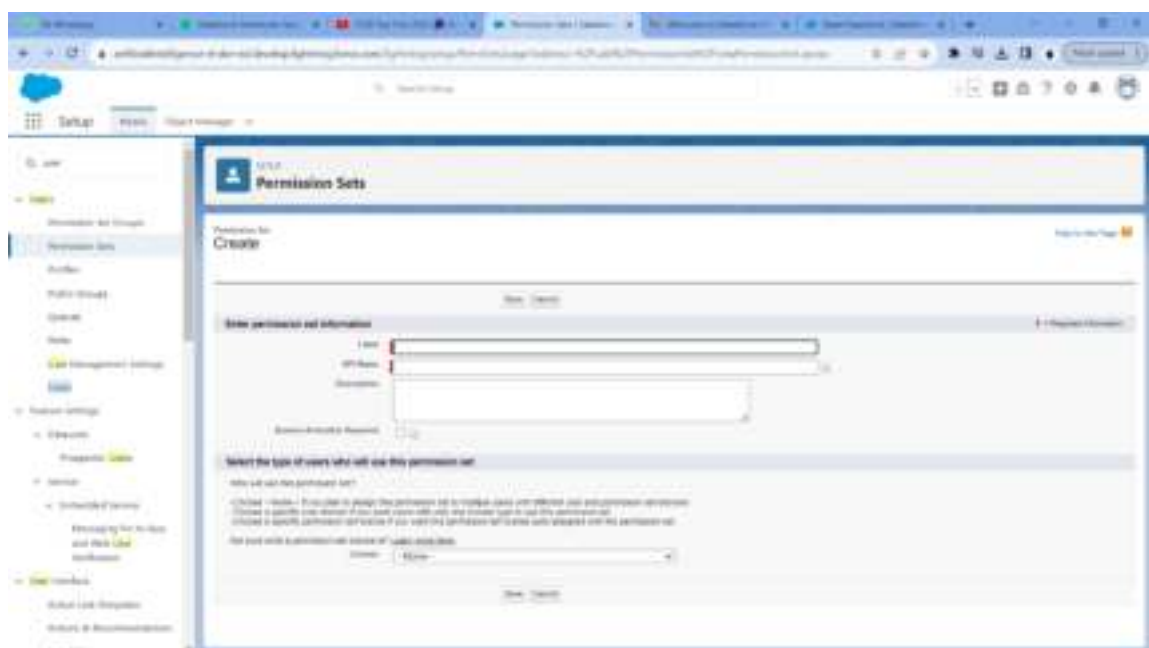
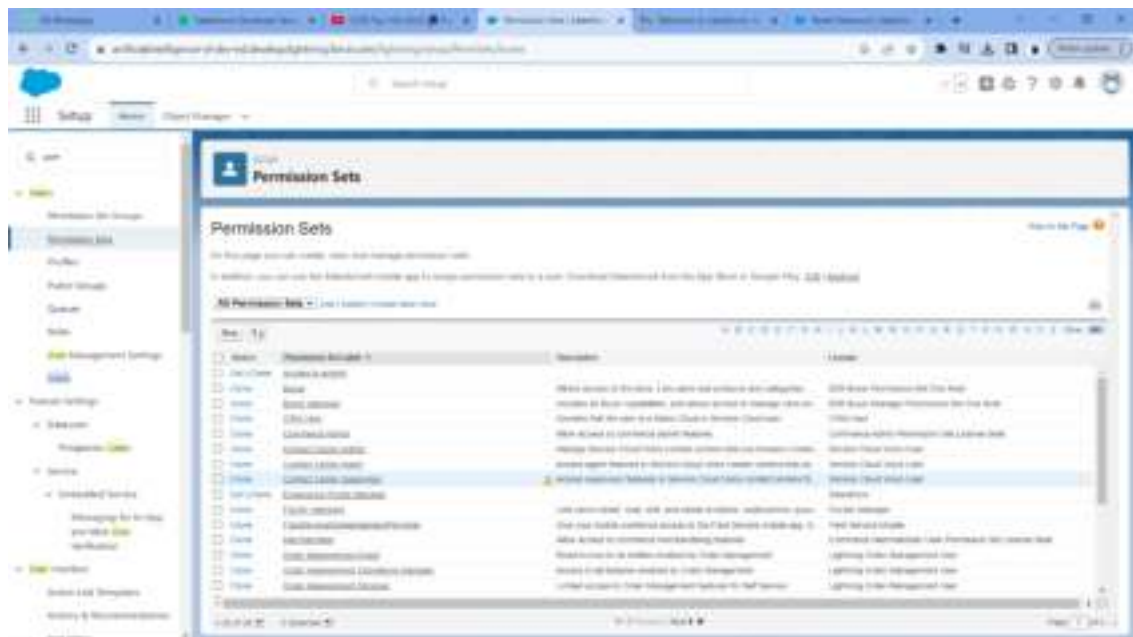
- Ensure that the Account records are owned by the respective users, with User A owning their records and User B owning their records.

### Organization-Wide Defaults:

- Set the organization-wide defaults for the Account object to "Private" to ensure that records are private by default.

### Testing:

access each other's records.





[illegible][illegible]

Setup | Settings | Object Manager

user

Setup

Permission Set Manager

Permission Set

salesmanager

View Settings | Clone | Clone | Edit | Delete | Assign | Unassign

Permissions Are Disabled | Grant Access | Revoke Access

Basic | Advanced

Tab Settings

Advanced | Basic

Object Permissions

Object Name	Read	Write	Delete	Share	Transfer	Transfer All	Transfer to Others
Account	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Case	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lead	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quote	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quote Line Item	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Field Permissions

Field Name	Read	Write	Transfer
Account Name	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Created By	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Last Modified By	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setup | Settings | Object Manager

user

Setup

Permission Set Manager

Permission Set

salesmanager

View Settings | Clone | Clone | Edit | Delete | Assign | Unassign

Current Assignments

add assignment

Illustration of a desert landscape with a cactus, mountains, and a sun.

No assignments defined

Setup | Users | Users Manager

### Select users to assign

All Users

Full Name | Role | Profile

<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User
<input type="checkbox"/>	Admin User	Admin	Admin User	Admin User

Cancel Assign

Setup | Users | Users Manager

### Select an expiration date for assigned users

No expiration date

Specify the expiration date

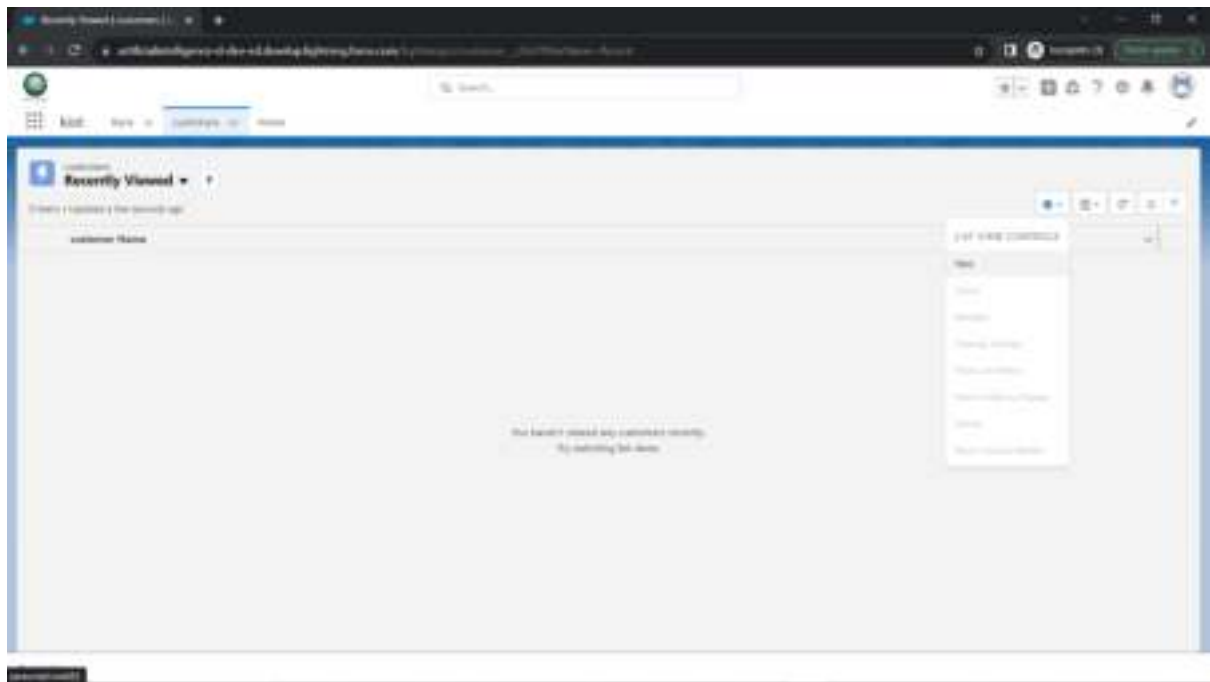
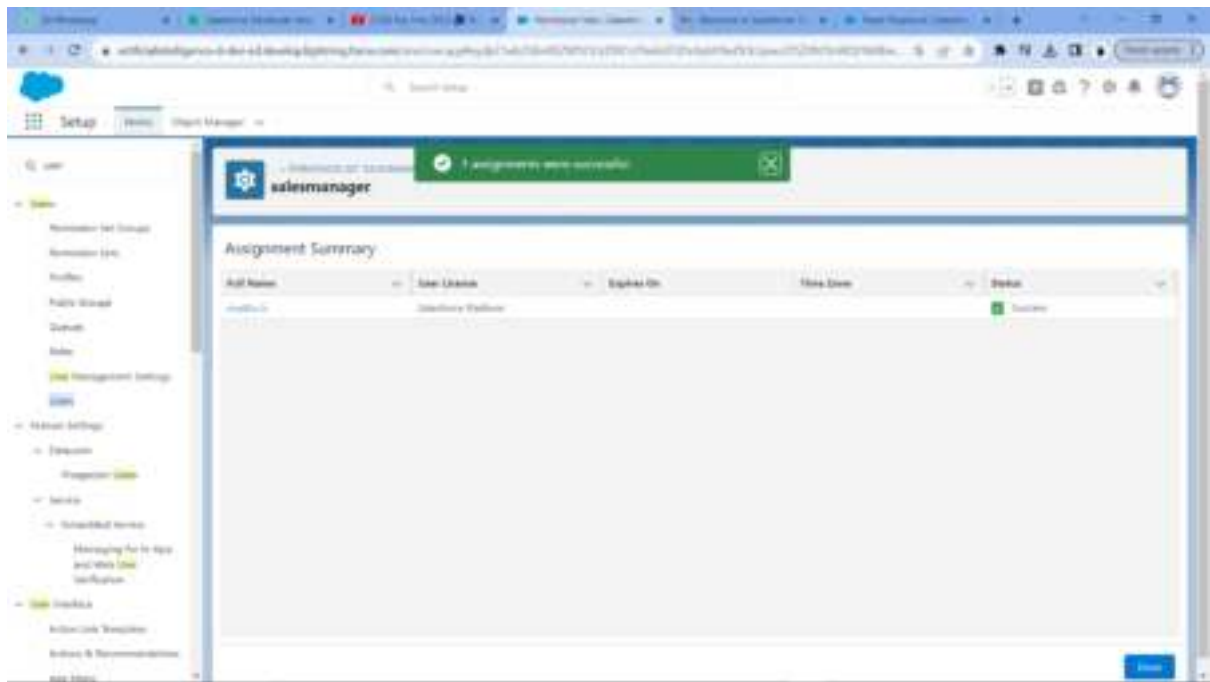
From Date

To Date

Selected Users

Full Name	Role	Profile	Expiration Date	Expiration On
Admin User	Admin	Admin User	2023-12-31	2023-12-31

Cancel Assign

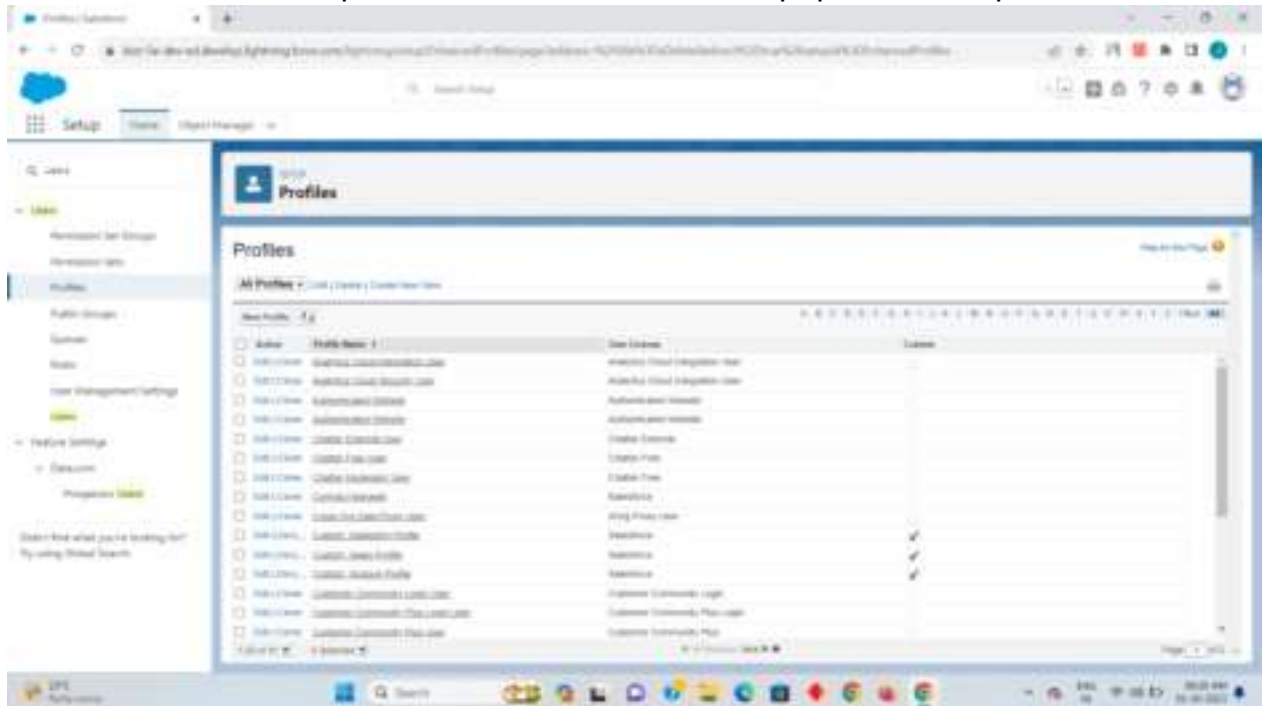




3. . Suppose there are 2 Users and they are having Create, Read, Edit access on Account Object with the same profile but we want to open up the access for one user to delete how will you implement the Security setting.

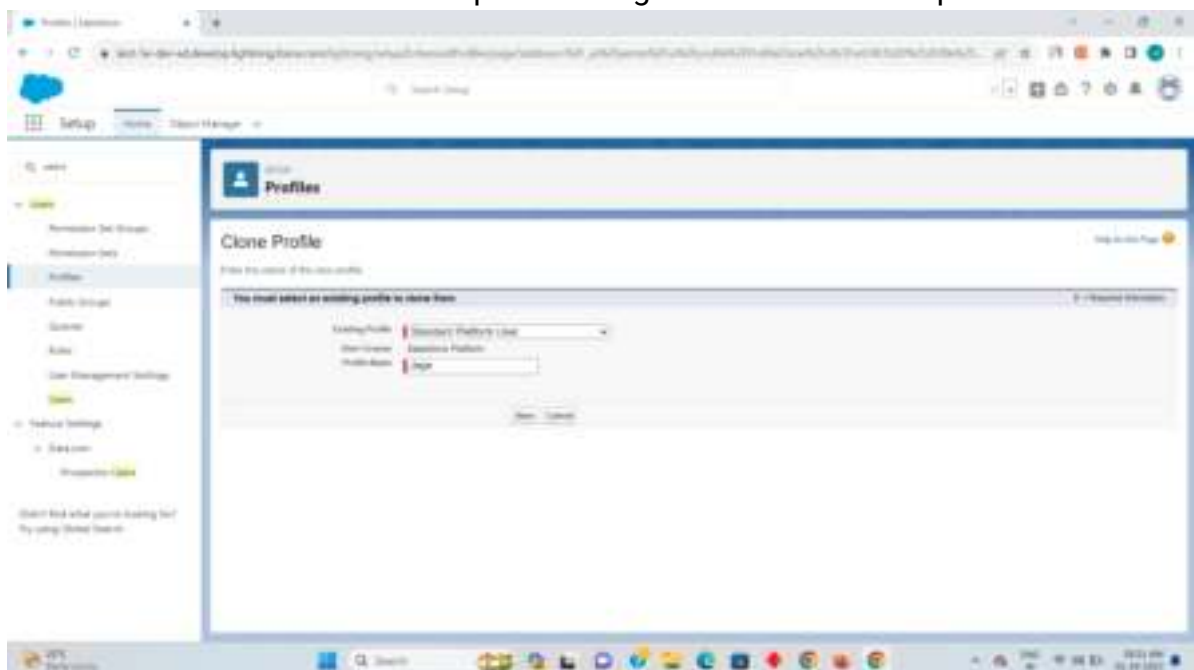
**Solution:**

**Step 1:** we need create a profile for the two user which has the access to Create, Read, Edit for follow as per. Setup-quick search[profile]



**Step 2:**

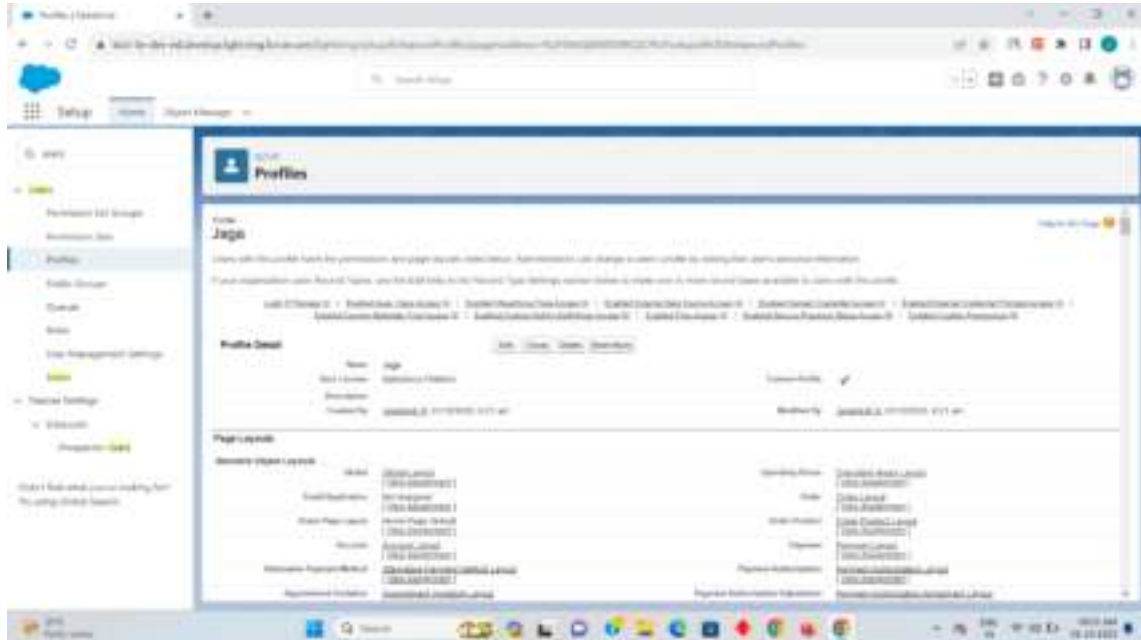
Click on the new to create a new profile along with the label and Api

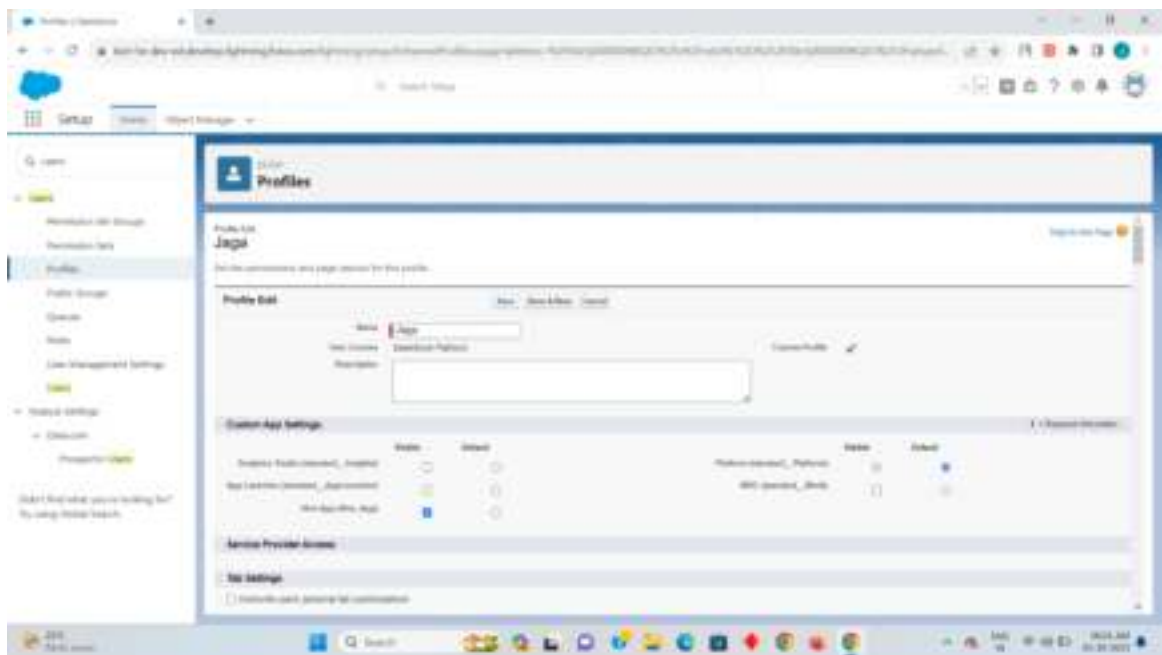
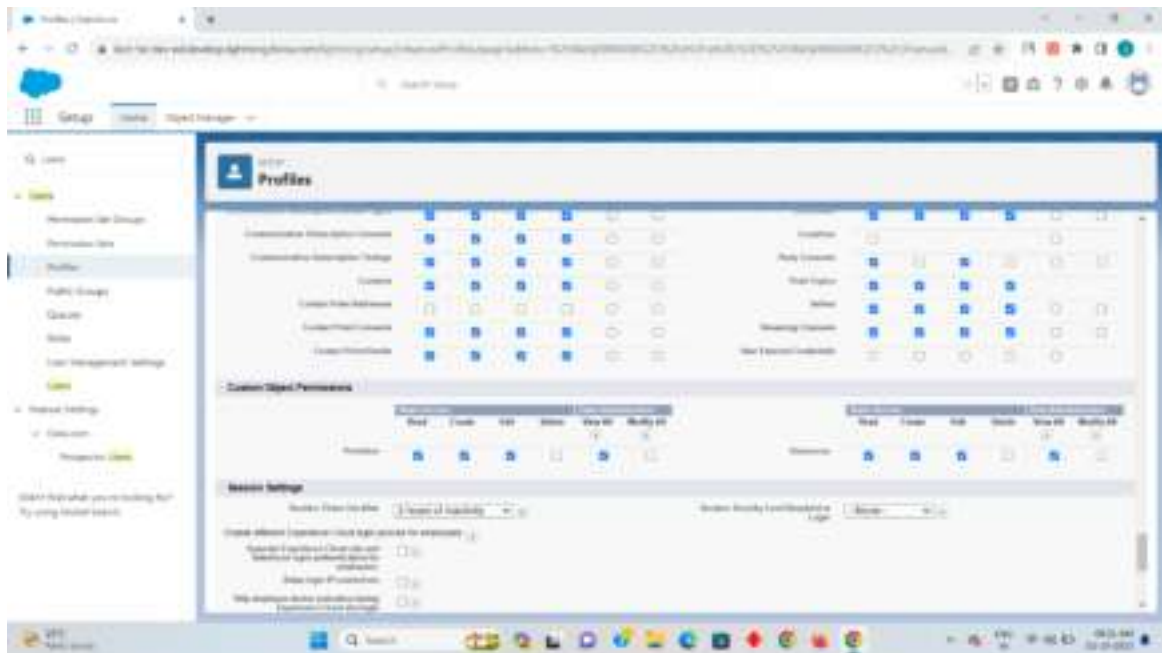


Here I had made it my profile name as Jaga and the existing profile as Standard Platform User.

### Step 3:

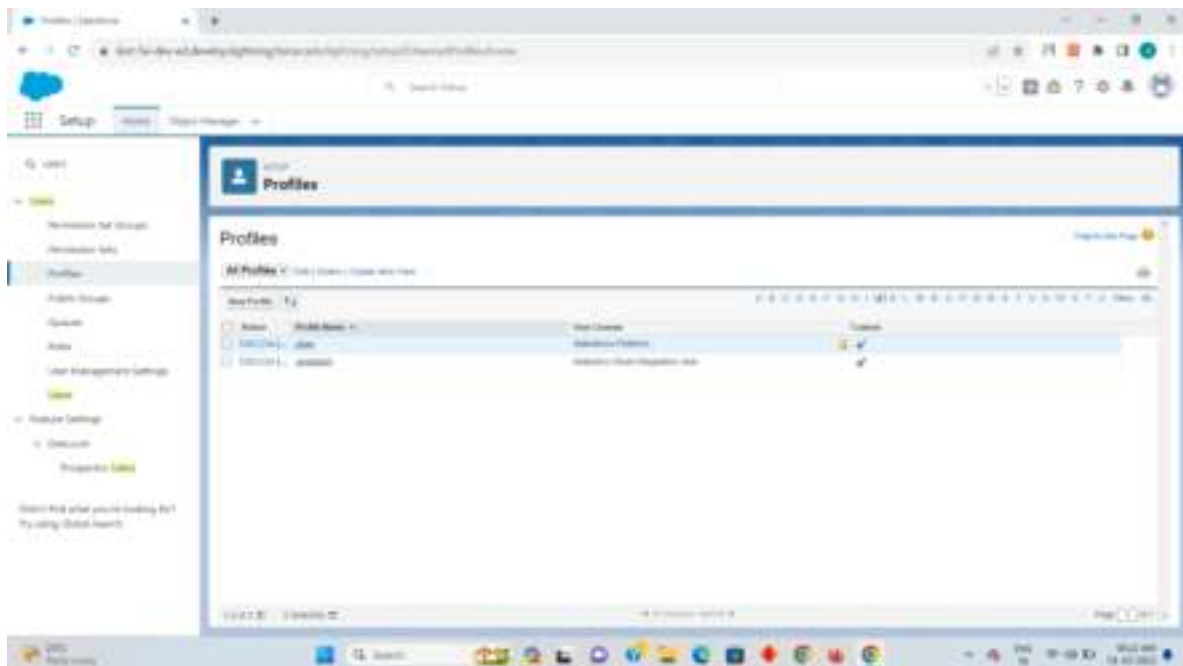
Now click on the edit and scroll down to custom object settings and enable the read,create,edit and view options. After that click on save.





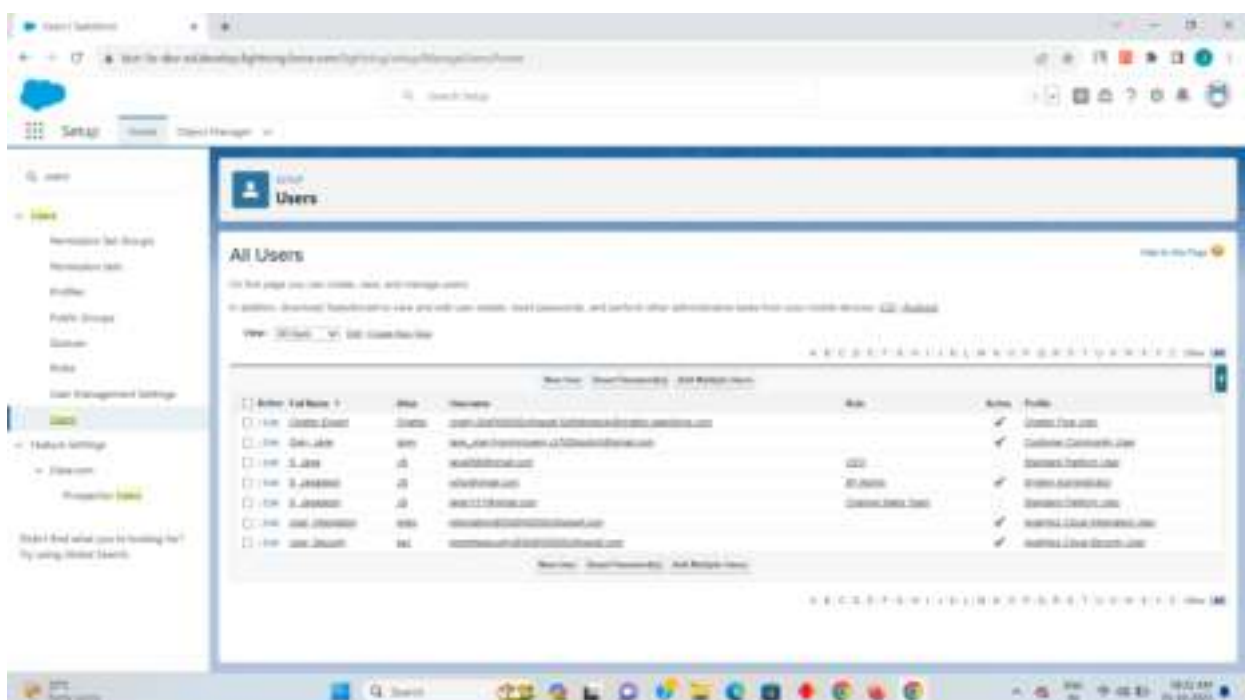
## Step 4

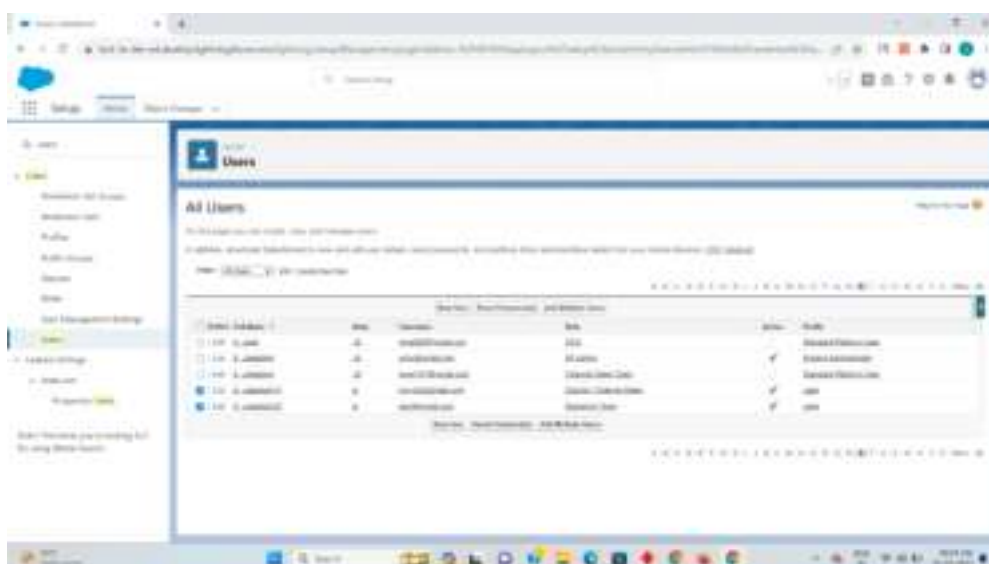
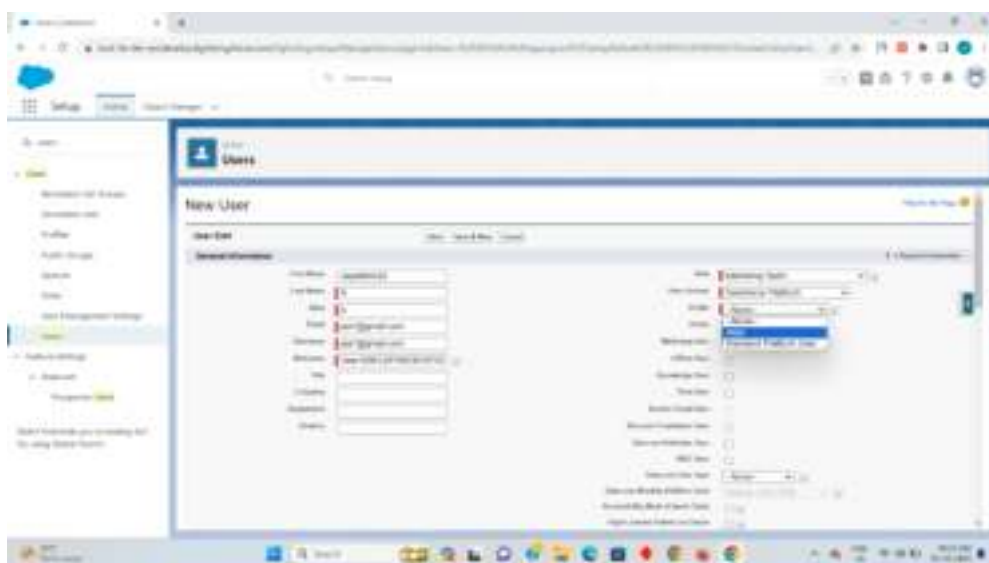
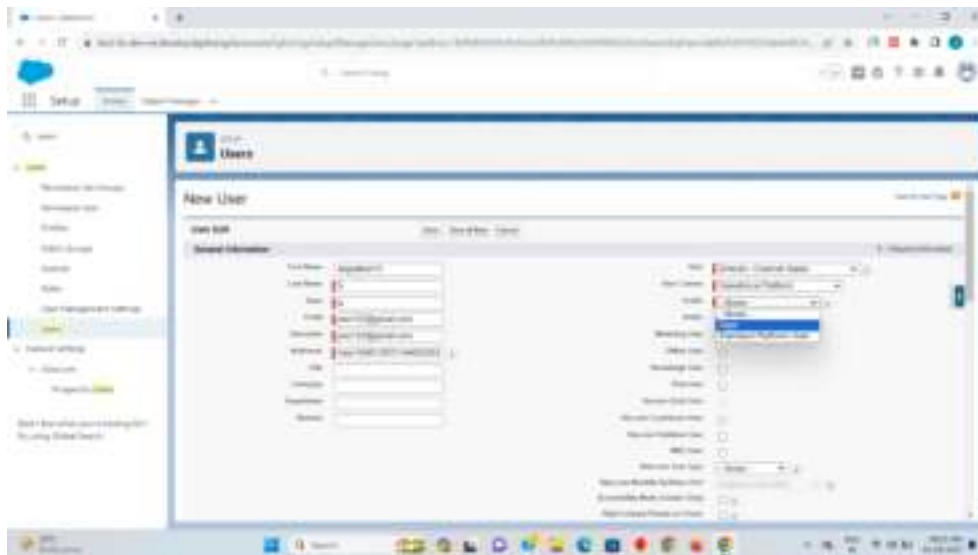
Now you can preview your created profile on the profile option here my profile name jaga has been created with the access of read,create,edit along with view on it



## Step 5:

Now create two users by enter into the Setup-quick search[user] and then click on new user after clicking that you need to create two user along with the profile as Jaga which we have created on the step 2.once the one user has been created click on the save&new so that you can create the second user and there the user name can be created with alternate name but with the same user profile and once the two user are create click on save.



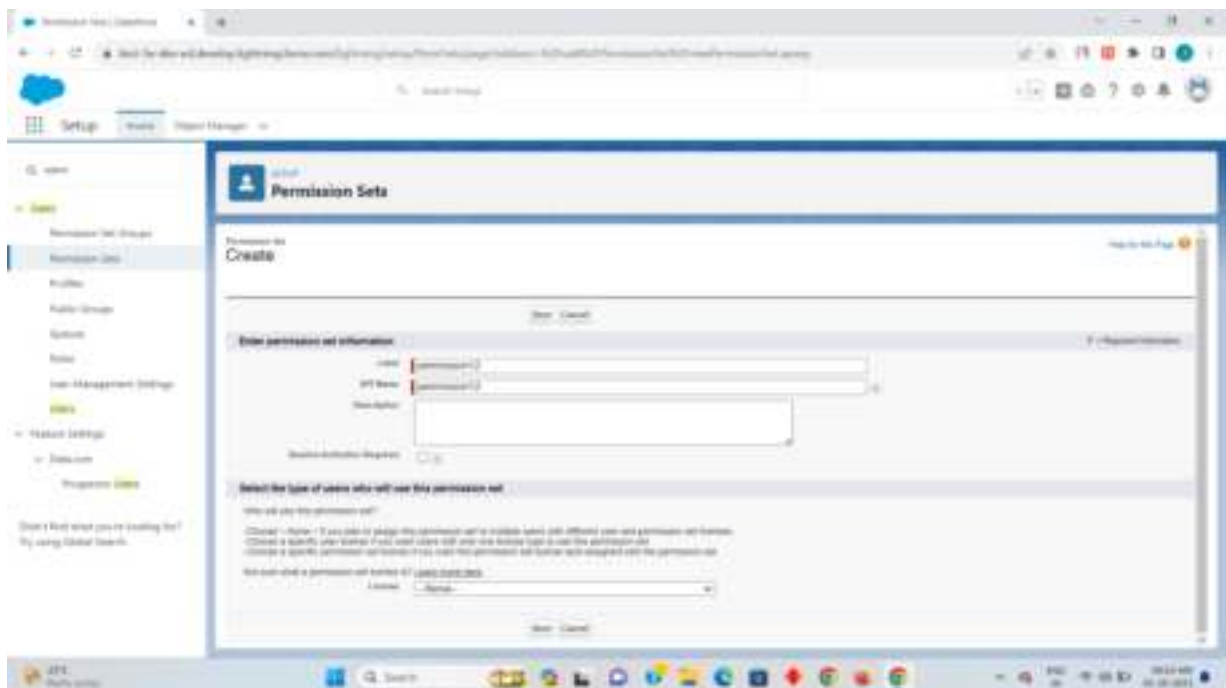
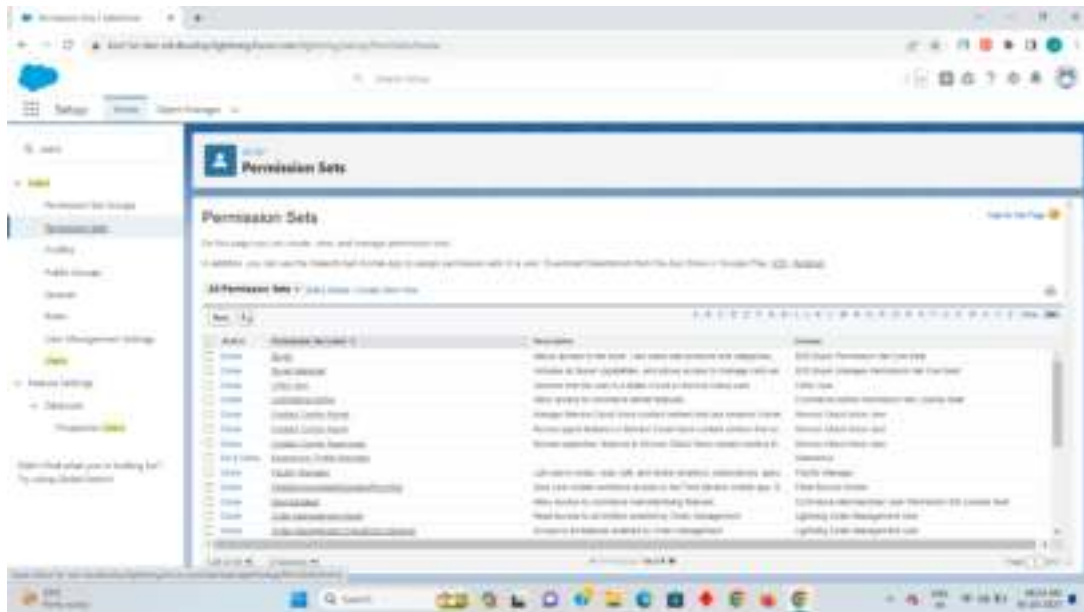


Now you can preview your two user that you have created in my side I had create the two users a Jagadesh11 and Jagadesh22 as a director channel sales with the marketing team.

### Step 6:

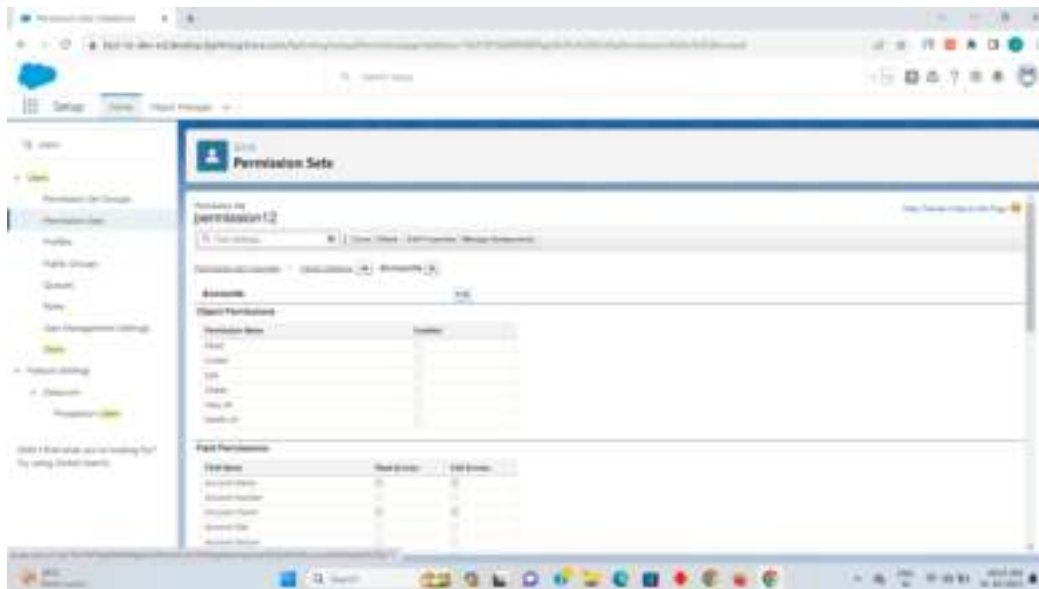
Now the two user as been created with the profile so that two user can perform the Create, Read, Edit and view on both the user. So as per the given task we need to allocate a specific access as delete on one user for that we need create a permission set for one user so it can created as

setup-quick search[permission set]-new-fill label name [auto select the API name]-click on save-object settings-accounts.



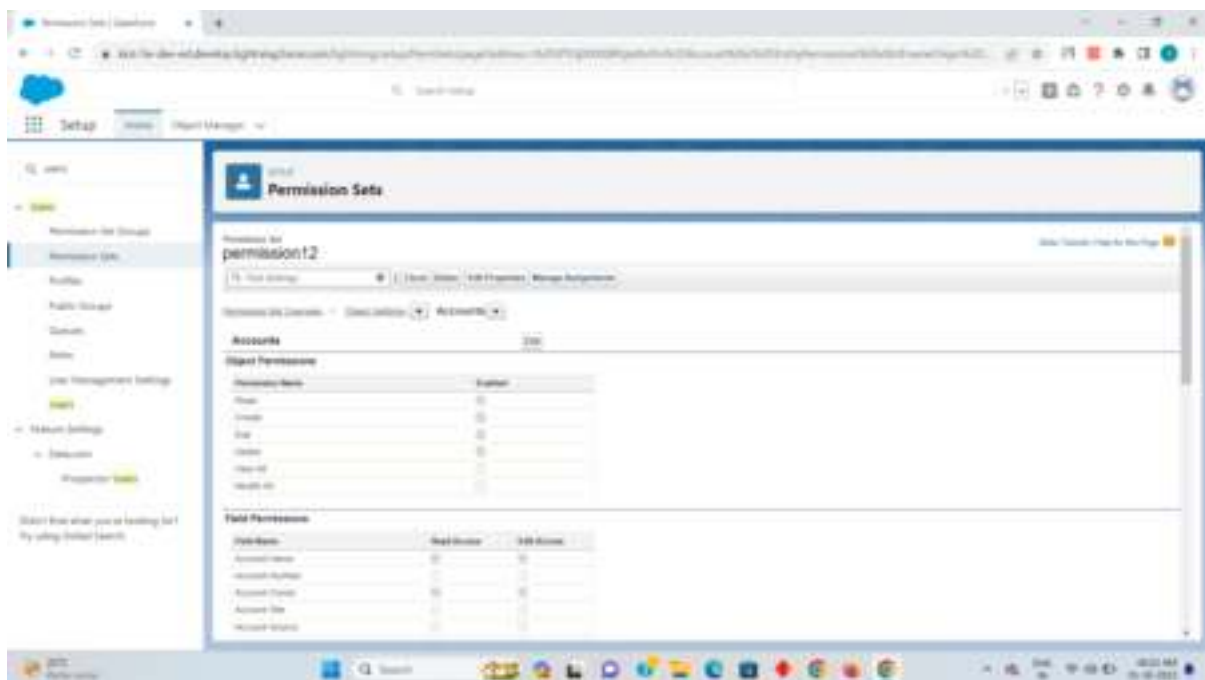




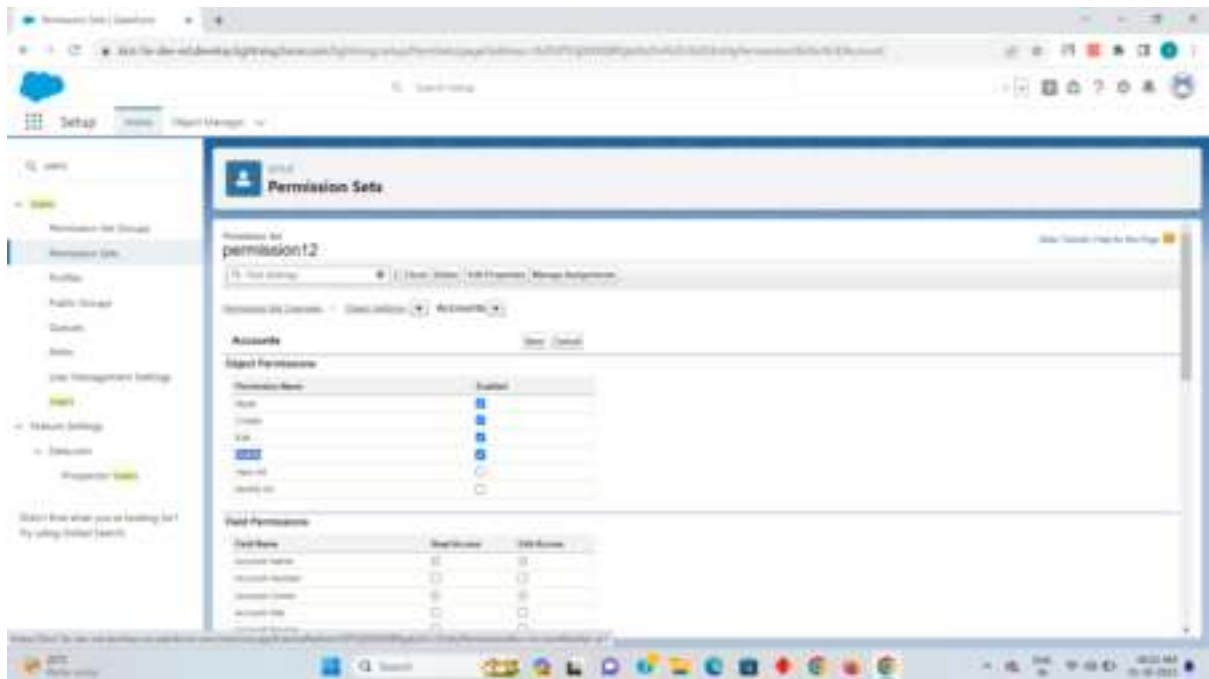


## Step 7:

Now to give the specific delete access to the user click on edit on the Account and then enable the read,create,edit and the delete on it so that the permission set will have a specific special access on it. once it has been done click on save and then click on manage assignment.

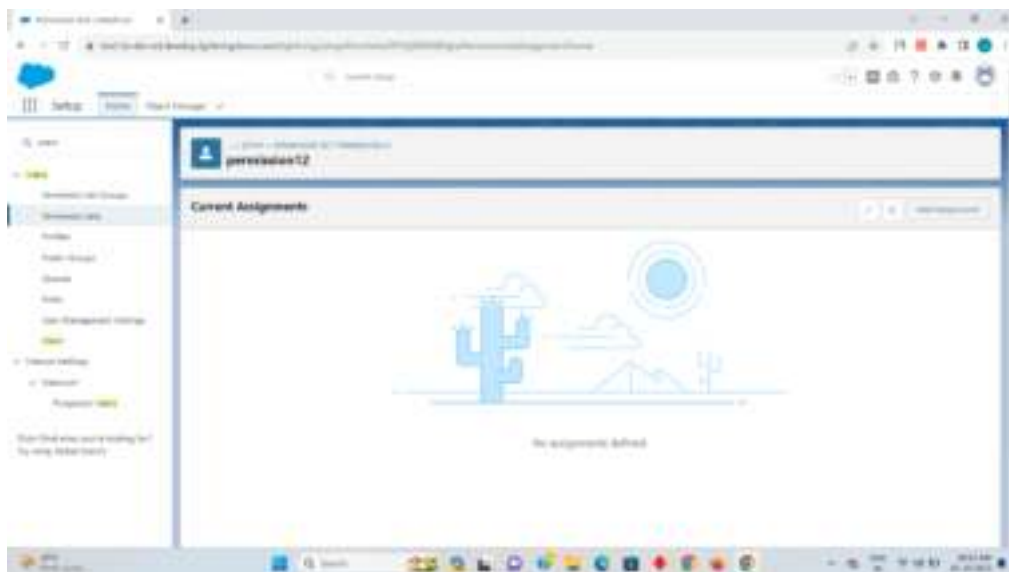


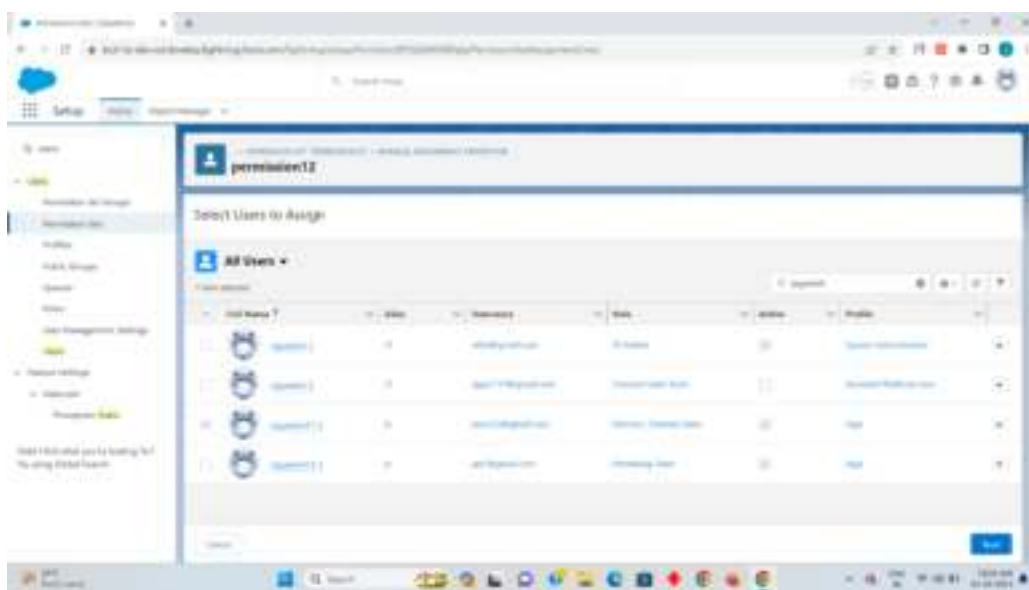
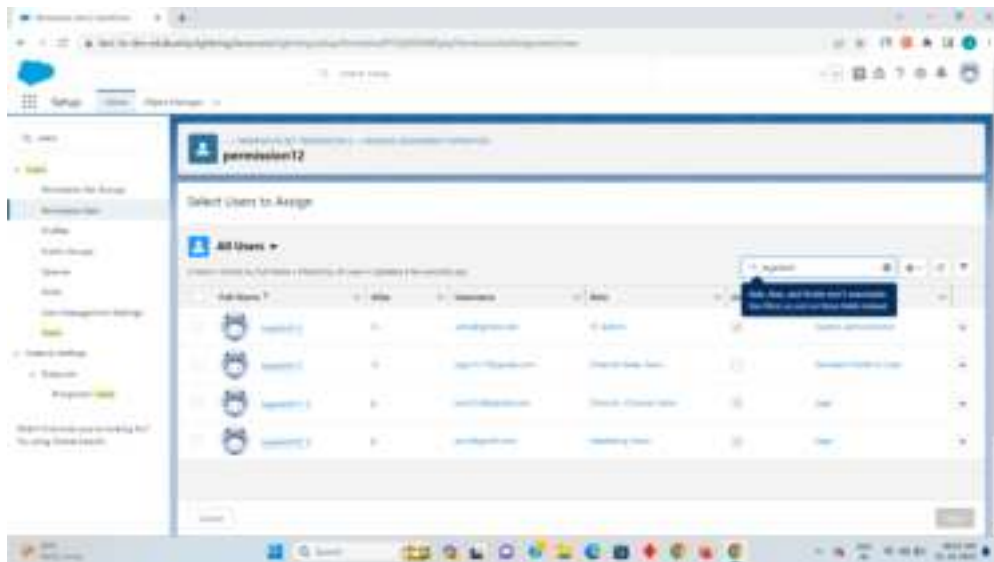




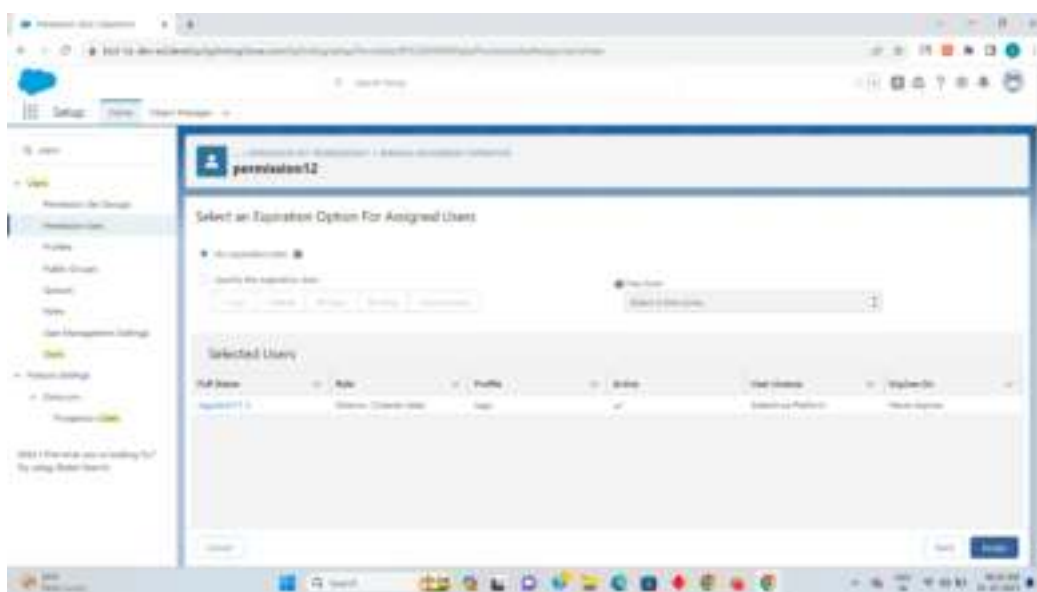
## Step 8

Now click on add assignment there you will find your two created users click on any one user to give a special access as delete on it and then click on assign so that the specific selected user can have a special access as delete on it.

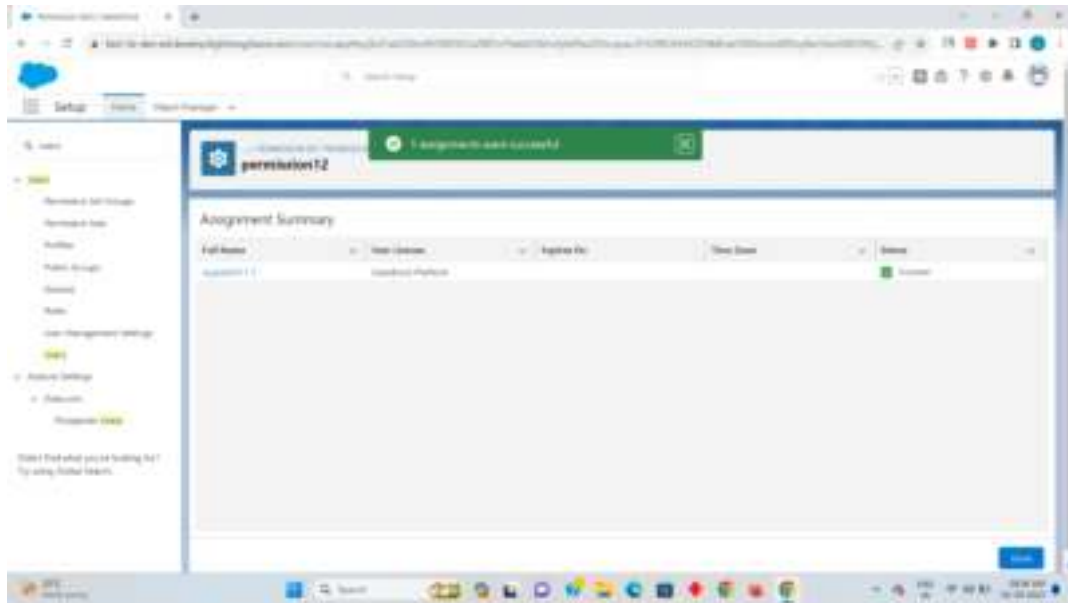




Click on next.



Now click on Assign.



Now the specific access for the Jagadesh11 user has been assigned successfully.


#### 4.Create a screen flow for a basic survey to fill in the details for any form.

##### Solution:

##### Step 1: Create a Custom Object

The next step is to create a custom object **Survey Result** and a few custom fields to store survey responses.

1. Click **Setup**.
2. In the Object Manager, click **Create | Custom Object**.
3. Now create a custom object **Survey Result** and fields as shown in the screenshot below:
4. Click **Save**.



SETUP > OBJECT MANAGER

Survey Result

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

Search Layouts for Salesforce Classic

Triggers

Validation Rules

Fields & Relationships

Quick Find

New Deleted Fields Field Dependencies Set History Tracking

8 Items, Sorted by Name

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Comment	Comment__c	Text Area(255)		
Created By	CreatedById	Lookup(User)		
Email	Email__c	Email		
Last Modified By	LastModifiedById	Lookup(User)		
Name	Name__c	Text(55)		
Owner	OwnerId	Lookup(User Group)		✓
Rating	Rating__c	Picklist		
Survey Result Name	Name	Auto Number		✓

## Step 2: Create a Thank You For Survey Lightning Email Template

1. Click **App Launcher**.
2. In the Quick Find box, type **Email Templates**.
3. Clicks on the **New Email template** button.
4. **Name** the **Lightning Email Template** and make sure to store it in the **Public Email Templates** folder.
5. Create a template like the following screenshot.

Email Template: Thank You Email - Survey

[Edit in Builder](#)
[Edit](#)
[Clone](#)

[Details](#)
[Related](#)

**Information**

Email Template Name	Thank You Email - Survey	Related Entity Type	Survey Result
Description		Folder	Public Email Templates
Made in Email Template Builder	<input checked="" type="checkbox"/>		

**Message Content:**

Subject	Thank You For Completing Our Survey!	Enhanced Labeled	
HTML Value	<div> <div></div> <div> <p>Hi {{{Survey_Result__c.Name__c}}},</p> <p>Thanks for taking time out to participate in our survey. We are very appreciative of the time you have taken to assist in our analysis, and commit to utilizing the information gained to contemplate and implement worthwhile improvements. We will share these results with you through your State Survey Agency, whom we also thank for their generous participation.</p> <p>Once again, we are extremely grateful for your contributing your valuable time, your honest information, and your thoughtful suggestions.</p> <p>Thanks, Automation Champion</p> </div> <div></div> </div>		

**Additional Information**

Created By	Bakshi Gupta, 12/21/2020, 4:23 PM	Last Modified By	Bakshi Gupta, 12/21/2020, 4:32 PM
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### Step 3: Create an Email Alert

1. Click **Setup**.
2. In the Quick Find box, type **Email Alerts**.
3. Select **Email Alerts**, click on the **New Email Alert** button.
4. **Name** the **Email Alert** and click the Tab button. The **Unique Name** will populate.
5. For **Object** select **Survey Result**.
6. For the **Email Template** chooses **Lightning Email Template Thank You Email – Survey**.
7. For **Recipient Type** select **Email Field: Email**.
8. Click **Save**.

**Edit Email Alert**  
**Survey - Thank You Email**

Create an email alert to associate with one or more workflow rules, approval processes, or entitlement processes. When changing an email alert, any modifications will apply to all rules, approvals, or entitlement processes associated with it.

**Email Alert Edit** [Save] [Save & New] [Cancel]

**Edit Email Alert** [Required Information]

Description: Survey - Thank You Email

Unique Name: Survey\_Thank\_You\_Email

Object: Survey Result

Email Template: Thank You Email - Survey

Protected Components: [None]

Recipient Type: Search: User [X] Set [Find]

Recipients:

**Available Recipients**

- User: Integration User
- User: Rakesh Gupta
- User: Security User

**Selected Recipients**

Email Field: Email

Add [Up Arrow] [Down Arrow] Remove

You can enter up to five (5) email addresses to be notified.

Additional Emails: [Text Area]

From Email Address: Current User's email address [X]

Make this address the default From email address for this object's email alerts.

[Save] [Save & New] [Cancel]

#### Step 4.1: Salesforce Flow – Create a Screen that Allow Users to Fill Survey

1. Click **Setup**.
2. In the Quick Find box, type **Flows**.
3. Select **Flows** then click on the **New Flow**.
4. Select the **Screen Flow** option and click on **Next** and configure the flow as follows:
  1. **How do you want to start building: Freeform**
5. We will use the **Screen** element to capture a **Survey response** form. Drag and drop a **Screen** element onto the canvas.

#### Step 4.2: Salesforce Flow – Add a Record Creates Element to Save Survey Response

1. Drag-and-drop the **Create Records** element onto the Flow designer.
2. Enter a name in the **Label (Save Response)** field; the **API Name** will auto-populate.
3. For **How Many Records to Create** – select **One**.
4. For **How to Set the Record Fields** – select **Use separate resources, and literal values**.
5. Select the **Survey\_Result\_\_c** object from the dropdown list.
6. **Set Field Values for the Survey Result**
  1. Row 1:
    1. **Field: Comment\_\_c**
    2. **Value: {!Comment}**

2. Click **Add Row**
3. Row 2:
  1. Field: Email\_\_c
  2. Value: {!Email.value}
4. Click **Add Row**
5. Row 3:
  1. Field: Name\_\_c
  2. Value: {!Name.firstName} {!Name.lastName}
6. Click **Add Row**
7. Row 3:
  1. Field: Rating\_\_c
  2. Value: {!Rating}
7. Click **Done**.

#### Step 4.3: Salesforce Flow — Call an Action — Email Alert to Send Out Thank You Email

The next step is to call the **Survey – Thank You Email** email alert from flow so that when flow fires it triggers the thank you email to survey participants.

1. Under **Toolbox**, select **Element**.
2. Drag-and-drop **Action** element onto the Flow designer.
3. In the **Action** box, type **Survey – Thank You Email**.
4. Clicks on the **Survey – Thank You Email** email alert.
5. Click **Done**.

Edit "Survey - Thank You Email" email alert

Use values from earlier in the flow to set the inputs for the "Survey - Thank You Email" email alert. To use its outputs later in the flow, store them in variables.

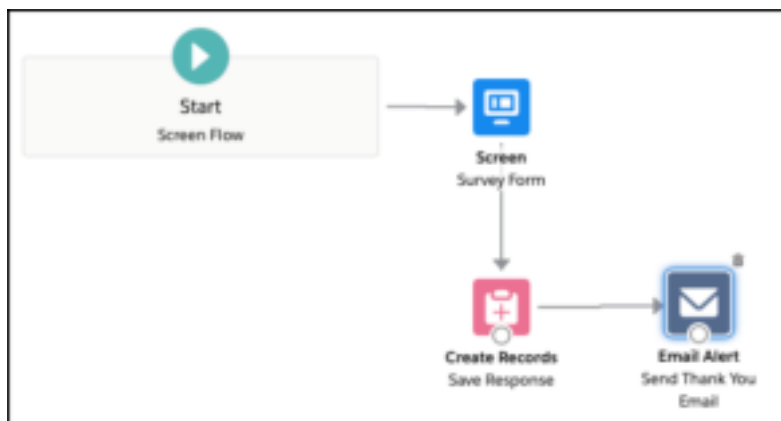
\* Label:  \* API Name:

Description:

Set Input Values

\* Save Response (ID):

In the end, Sergio's **Flow** will look like the following screenshot:



1. Click **Save**.
2. Enter **Flow Label** the **API Name** will auto-populate.
3. Click **Show Advanced**.
4. **How to Run the Flow: User or System Context—Depends on How Flow is Launched**
5. **Type: Screen Flow**
6. **API Version for Running the Flow: 51**
7. **Interview Label: Survey {!\$Flow.CurrentDateTime}**
8. Click **Save**.



## Save as

[A New Version](#)[A New Flow](#)

\* Flow Label

Survey

\* Flow API Name

Survey

Description

[Hide Advanced](#)

How to Run the Flow ⓘ

User or System Context-Depends on How Flow is Launched

\* Type

Screen Flow

\* API Version for Running the Flow

51

Interview Label ⓘ

Insert a resource...



Survey (ISFlow.CurrentDateTime)

Last Modified

12/21/2020, 4:54 PM by Rakesh Gupta

Status:

Active

Type:

Screen Flow

Version Number:

2

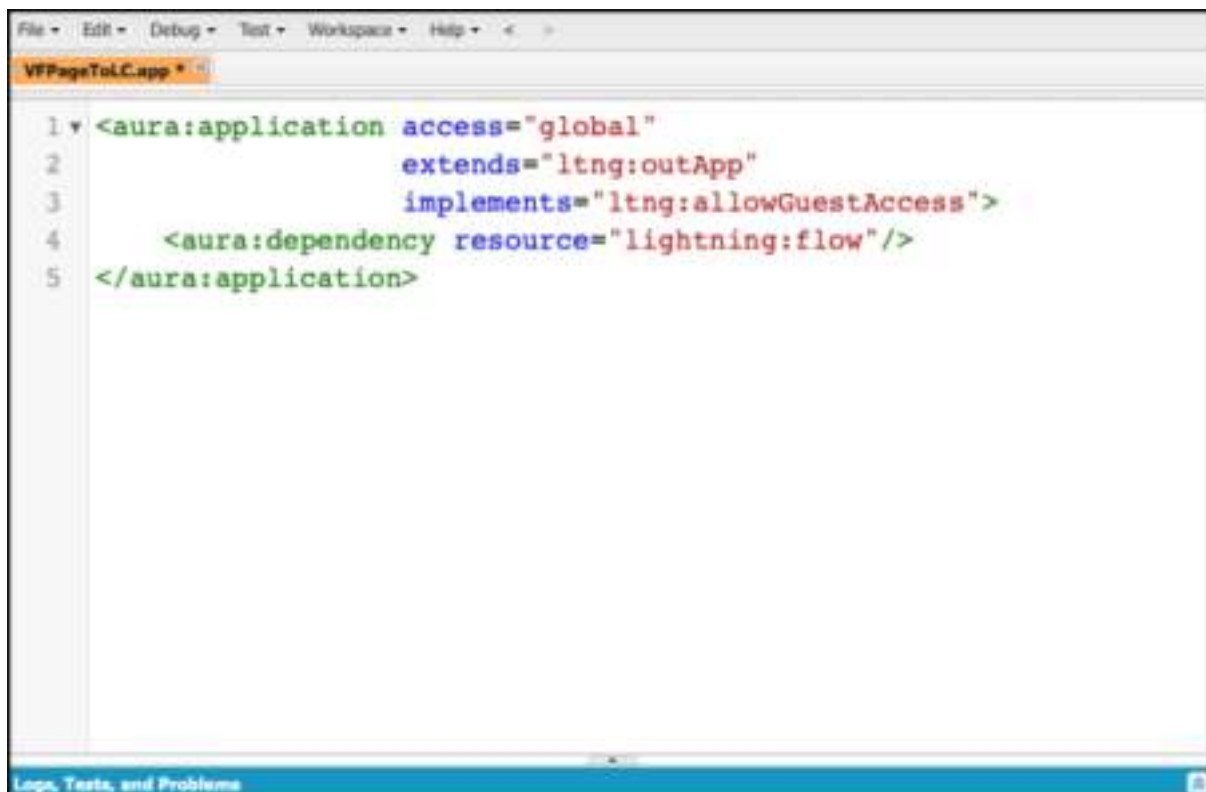
Cancel

Save

## Step 5: Create a Lightning Application to Render Lightning Runtime for Flow in a Visualforce Page

Now we will create a Lightning Application that declares a dependency on the **lightning:flow** component.

1. Click **Setup | Developer Console**
2. Navigate to **File | New | Lightning Application**
3. Enter a **Name** (VFPageToLC) field, make sure to select the **Lightning Out Dependency App** checkbox.
4. Click **Submit**.
5. Copy code from [GitHub](#) and paste it into your Lightning Application.
6. **Save** your code.



```
1 <aura:application access="global"
2     extends="ltng:outApp"
3     implements="ltng:allowGuestAccess">
4     <aura:dependency resource="lightning:flow"/>
5 </aura:application>
```

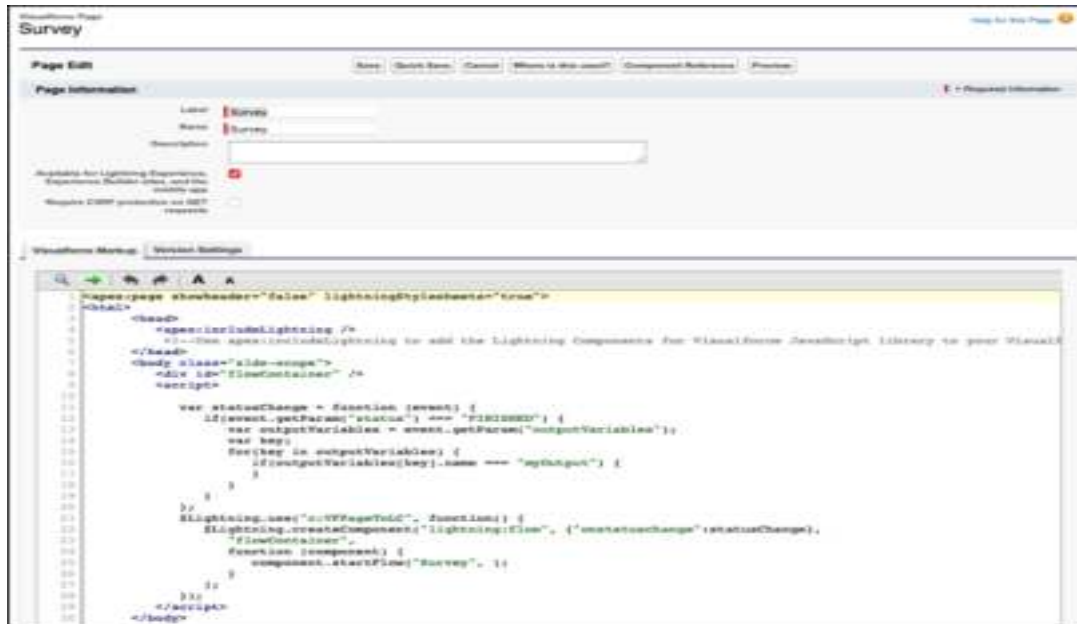
## Step 6: Create a Visualforce Page and Embed Your Flow Into It

Now we will create a Lightning Application that declares a dependency on the **lightning:flow** component.

Add the Lightning Components for Visualforce JavaScript library to your Visualforce page using the **<apex:includeLightning/>** component. In the Visualforce page, reference the dependency app. Then write a JavaScript function that creates the component on the page using **\$Lightning.createComponent()** Click **Setup**.

1. In the Quick Find box, type **Visualforce Pages**.
2. Clicks on the **New** button.
3. Copy code from [GitHub](#) and paste it into your visualforce page

#### 4. Click **Save**.



### Step 7: Create a Force.com Site to Open Your Flow for Unauthenticated Access

Now we will create a site to open the flow for unauthenticated access.

1. Click **Setup**.
2. In the Quick Find box, type **Sites**.
3. Clicks on the **New** button.
4. Fill the details as per the screenshot below:
5. Click **Save**.

Under site, **Public Access Settings** make sure that guest users have **Create** access on **Survey Result** object and **Edit** on the **fields**.

Proof of Concept

Now onward, if someone opens the site url and fills the form:

After successful submission, he/she will receive an email.

