

A CRM APPLICATION FOR LAPTOP RENTALS

BY

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Project Abstract

The Laptop Rental Management System, built on Salesforce, is a comprehensive solution for managing laptop rentals, bookings, and billing in corporate and academic settings. It streamlines inventory management by tracking available, rented, and returned laptops, simplifies booking for users like employees or students, and automates billing for timely, accurate invoicing. With user management features, roles and permissions ensure secure access control, while advanced reporting provides valuable insights into rental activity, finances, and inventory status. This system showcases Salesforce's ability to create tailored solutions, improving operational efficiency, accuracy, and user experience within an organization.

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INTRODUCTION

The Laptop Rental Management System project is a Salesforce-based solution designed to streamline and automate the management of laptop rentals in corporate and academic environments. This system addresses the growing need for efficient and effective management of laptop inventories, booking processes, billing, and reporting, ensuring that organizations can offer seamless laptop rental services to their employees, students, or customers.

The implementation of the Laptop Rental Management System involves several steps, starting with the creation of custom objects and fields, followed by defining relationships and validation rules. The project then focuses on enhancing the user interface with custom tabs and a Lightning App, setting up role-based access controls, and developing comprehensive reporting and analytics capabilities.

This project leverages Salesforce's robust platform to provide a scalable, efficient, and userfriendly solution for managing laptop rentals. By automating key processes and providing insightful analytics, the system aims to enhance operational efficiency, improve user experience, and support data-driven decision-making in laptop rental management.

TASK 1: Sales Force account creation

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form, enter the required details
3. Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins.

The screenshot shows a Salesforce user profile for 'Shiva Kumar Dasari'. The top navigation bar includes links for Sales, Home, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Campaigns, Dashboards, People, and More. The main content area features a colorful background illustration of mountains and a hot air balloon. On the left, there's a circular profile picture of a blue cat-like character, a 'User Detail' button, and a 'Edit' button. Below the profile picture, there's a section to 'Share your awesomeness with the world.' A 'TRAILHEAD' badge is present, along with links to 'Learn new skills on Trailhead, the fun way to learn Salesforce.' and 'Connect with fellow Trailblazers on the Trailblazer Community.' The 'Details' section contains fields for Name (Shiva Kumar Dasari), Manager, Title, and Company Name (Mallareddy University). The 'Related' section shows 'Groups (0)'. A 'To Do List' link is also visible.

TASK 2: OBJECT CREATION

a) Create Total Laptops Object

From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

- 1) Enter the label name >> Total Laptops
- 2) Plural label name >> Total Laptops
- 3) Enter Record Name Label and Format

Record Name >> Total Laptops

Data Type >> Text

Click on Allow reports, Allow search and Track Field History,

Allow search >> Save.

The screenshot shows the Salesforce Setup interface with the title 'New Custom Object'. The 'Custom Object Definition Edit' screen is displayed. Key fields filled in include:

- Label:** Total Laptops
- Plural Label:** Total Laptops
- Object Name:** Total_Laptops
- Description:** (Empty text area)
- Context-Sensitive Help Setting:** Open the standard Salesforce.com Help & Training window (radio button selected)
- Content Name:** None

At the top right, there are 'Save', 'Save & New', and 'Cancel' buttons. A status bar at the bottom indicates: 'Permissions for this object are disabled for all profiles by default. You can enable object permissions in permission sets or by editing custom profiles.' with links to 'Tell me more!' and 'Don't show this message again'.

b) Create consumer Object

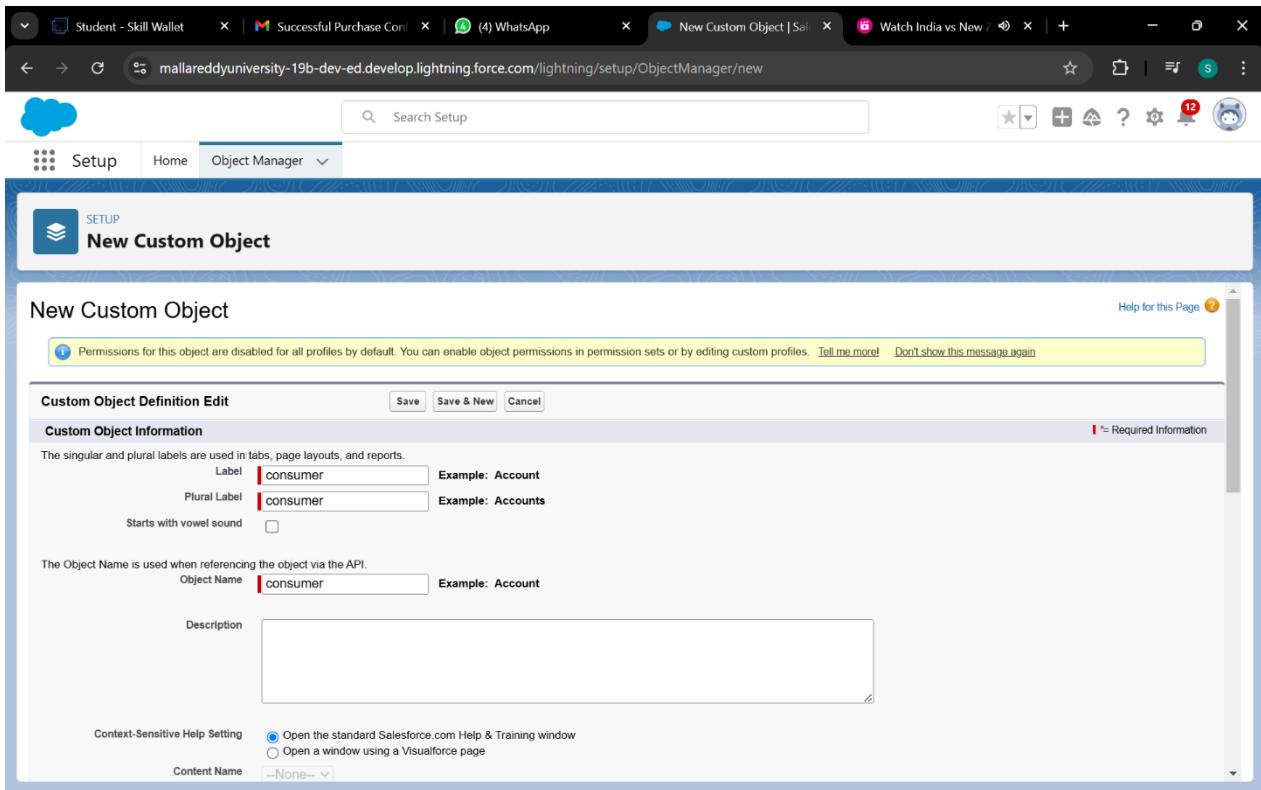
From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

- 1) Enter the label name >> consumer
- 2) Plural label name >> consumer
- 3) Enter Record Name Label and Format

Record Name >> consumer_name

Data Type >> Name

Click on Allow reports,Allow search and Track Field History, Allow search >> Save.



c) Create Laptop Bookings Object

From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

- 1) Enter the label name >> Laptop Bookings
- 2) Plural label name >> Laptop Bookings
- 3) Enter Record Name Label and Format
Record Name >> Laptop Bookings
Data Type >> Name

Click on Allow reports,Allow search and Track Field History,

Allow search >> Save.

The screenshot shows the Salesforce Setup interface with the title 'New Custom Object'. The 'Custom Object Definition Edit' section is active. Key fields filled in include:

- Label:** Laptop Bookings
- Plural Label:** Laptop Bookings
- Object Name:** Laptop_Bookings
- Description:** (Empty text area)
- Context-Sensitive Help Setting:** Open the standard Salesforce.com Help & Training window (radio button selected)
- Content Name:** --None--

A yellow banner at the top states: "Permissions for this object are disabled for all profiles by default. You can enable object permissions in permission sets or by editing custom profiles." It includes links for "Tell me more!" and "Don't show this message again".

d) Create Billing Process Object

From the setup page >> Click on Object Manager >> Click on Create >> Click on Custom Object.

- 1) Enter the label name >> Billing Process
- 2) Plural label name >> Billing Process
- 3) Enter Record Name Label and Format
Record Name >> Billing ProcessName
Data Type >> Name

Click on Allow reports, Allow search and Track Field History,

Allow search >> Save.

The screenshot shows the Salesforce Setup interface with the title 'New Custom Object'. The 'Custom Object Definition Edit' screen is displayed. At the top, there are buttons for 'Save', 'Save & New', and 'Cancel'. A message bar at the top indicates that permissions for this object are disabled by default and provides links to 'Tell me more!' and 'Don't show this message again'.

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label	Billing Process	Example:	Account
Plural Label	Billing Process	Example:	Accounts

Starts with vowel sound

The Object Name is used when referencing the object via the API.

Object Name	Billing_Process	Example:	Account
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Description

Context-Sensitive Help Setting

Open the standard Salesforce.com Help & Training window
 Open a window using a Visualforce page

Content Name

--None--

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Task 3: TABS

A tab is like a user interface that is used to build records for objects and to view the records in the objects.

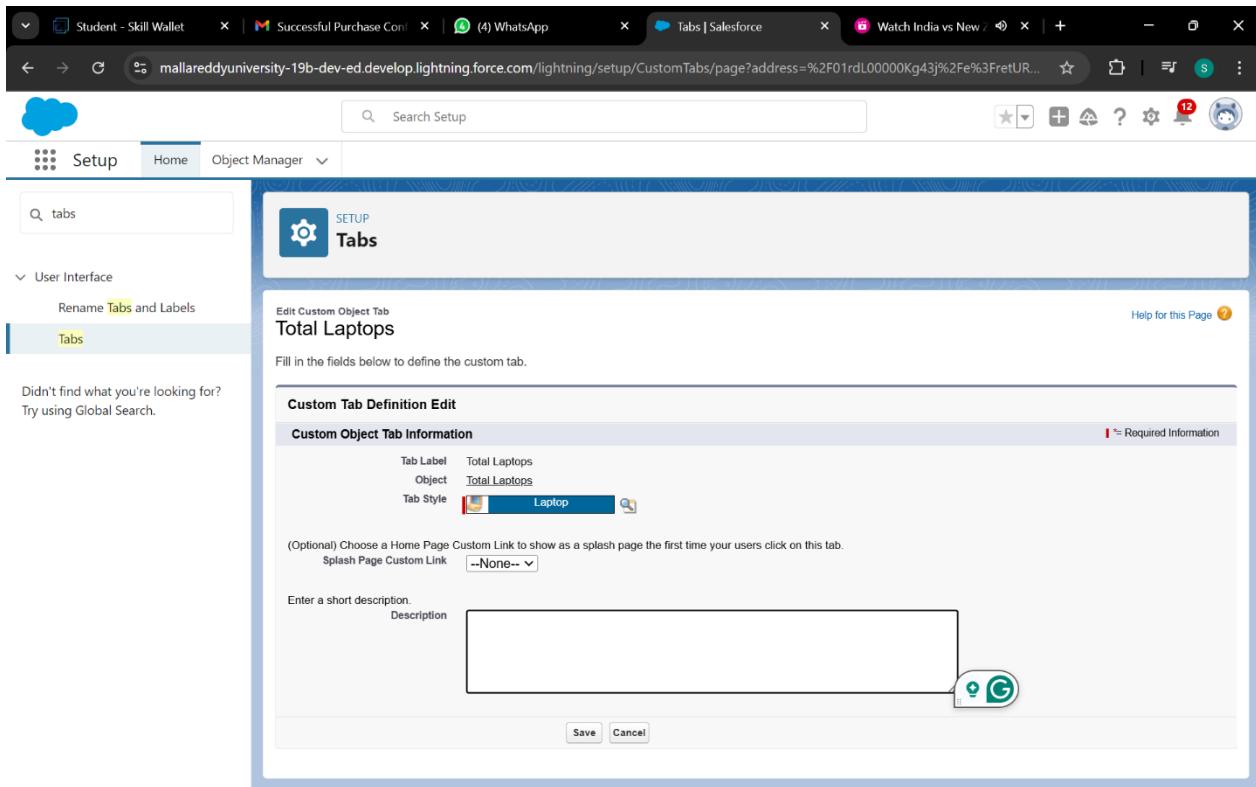
We have created 4 object fields for that fields we are creating custom tabs

Go to setup page >> Type Tabs in Quick Find bar >> click on tabs >> New (under custom object tab)

a)Creation of Total Laptops tab

1.Select Object(Total Laptops) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .

2.Make sure that the Append tab to users' existing personal customizations is checked. 3.Click save.



b)Creation of Laptop Bookings tab:

1.Select Object(Laptop Bookings) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .

2. Make sure that the Append tab to users' existing personal customizations is checked. 3. Click save.

The screenshot shows the Salesforce Setup interface. In the top navigation bar, there are tabs for 'Student - Skill Wallet', 'Successful Purchase Confirmation', '(4) WhatsApp', and 'Tabs | Salesforce'. Below the tabs is a search bar labeled 'Search Setup'. On the left, a sidebar titled 'User Interface' has a section for 'Rename Tabs and Labels' and 'Tabs', which is currently selected. A message at the bottom of the sidebar says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Edit Custom Object Tab' for 'Laptop Bookings'. It contains a form with fields for 'Tab Label' (Laptop Bookings), 'Object' (Laptop Bookings), and 'Tab Style' (Books). There is also a note about choosing a 'Splash Page Custom Link' and a 'Description' field. At the bottom are 'Save' and 'Cancel' buttons.

c) Creation of Consumer tab:

1. Select Object(Laptop Bookings) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .

2. Make sure that the Append tab to users' existing personal customizations is checked. 3. Click save.

The screenshot shows the Salesforce Setup interface with the 'Tabs' page selected. A search bar at the top right contains the text 'Search Setup'. Below it, a navigation bar includes 'Setup', 'Home', and 'Object Manager'. On the left, a sidebar lists 'User Interface' sections: 'Rename Tabs and Labels' (with 'Tabs' highlighted) and 'Tabs'. A message at the bottom of the sidebar says 'Didn't find what you're looking for? Try using Global Search.' The main content area is titled 'Edit Custom Object Tab consumer'. It contains a sub-section 'Custom Object Tab Information' with fields: 'Tab Label' (set to 'consumer'), 'Object' (set to 'consumer'), and 'Tab Style' (set to 'Can'). Below this, there's a note about choosing a 'Splash Page Custom Link' and a dropdown menu set to 'None'. A large text input field for 'Description' is empty. At the bottom are 'Save' and 'Cancel' buttons, with a 'Help for this Page' link above them.

d) Creation of Billing Process tab:

1. Select Object(Billing Process) >> Select the tab style >> Next (Add to profiles page) keep it as default >> Next (Add to Custom App) uncheck the include tab .
2. Make sure that the Append tab to users' existing personal customizations is checked. 3. Click save.

Setup

tabs

User Interface

Rename Tabs and Labels

Tabs

Didnt find what you're looking for?
Try using Global Search.

SETUP

Tabs

Edit Custom Object Tab

Billing Process

Fill in the fields below to define the custom tab.

Custom Tab Definition Edit

Custom Object Tab Information

Tab Label: Billing Process
Object: Billing_Process
Tab Style: Building Block

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.
Splash Page Custom Link: -None-

Enter a short description
Description:

Save Cancel

After creation of all tabs it looks like

Setup

tabs

User Interface

Rename Tabs and Labels

Tabs

Didnt find what you're looking for?
Try using Global Search.

SETUP

Tabs

Custom Tabs

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external web applications and content within the Salesforce window. Visualforce tabs allow you to embed Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation menu in Lightning Experience and the mobile app. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.

Custom Object Tabs

Action	Label	Tab Style	Description
Edit Del	Billing_Process	Building Block	
Edit Del	consumer	Can	
Edit Del	Laptop Bookings	Books	
Edit Del	Total Laptops	Laptop	

Web Tabs

No Web Tabs have been defined

Visualforce Tabs

No Visualforce Tabs have been defined

Task 4: The Lightning App

Create a Lightning App

To create a lightning app page:

1.Go to setup page >> search “app manager” in quick find >> select “app manager” >> click on New lightning App.

2.Fill the app name in app details as LAPTOP RENTALS >>Next >> (App option page) keep it as default >> Next >> (Utility Items) keep it as default >> Next.

3.Upload a photo that is related to your app.

4.To Add Navigation Items:

Select the items (Total Laptops,consumer,Laptop Booking,Billing Process) from the search bar and move it using the ar button >> Next.

5.To Add User Profiles:

Search profiles (System administrator) in the search bar >> click on the ar button >> save & finish.

1-->

New Lightning App

App Options

Navigation and Form Factor 1

* Navigation Style
 Standard navigation
 Console navigation

Supported Form Factors
 Desktop and phone
 Desktop
 Phone

Setup and Personalization 1

Setup Experience
 Setup (full set of Setup options)
 Service Setup

App Personalization Settings

Disable end user personalization of nav items in this app
 Disable temporary tabs for items outside of this app
 Use Omni-Channel sidebar

Back Next

2-->

New Lightning App

Utility Items (Desktop Only)

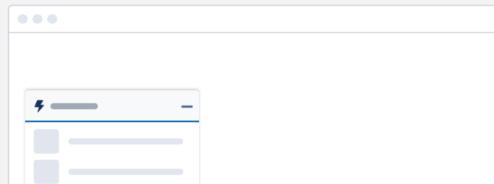
Give your users quick access to productivity tools and add background utility items to your app.

Add Utility Item

Utility Bar Alignment ⓘ

Default

The utility bar is a fixed footer that opens components in docked panels. Available only when the app is viewed in Lightning Experience on a desktop.



Back

Next

3-->

New Lightning App

Navigation Items

Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.

Available Items

Create ⏺

billing

Selected Items

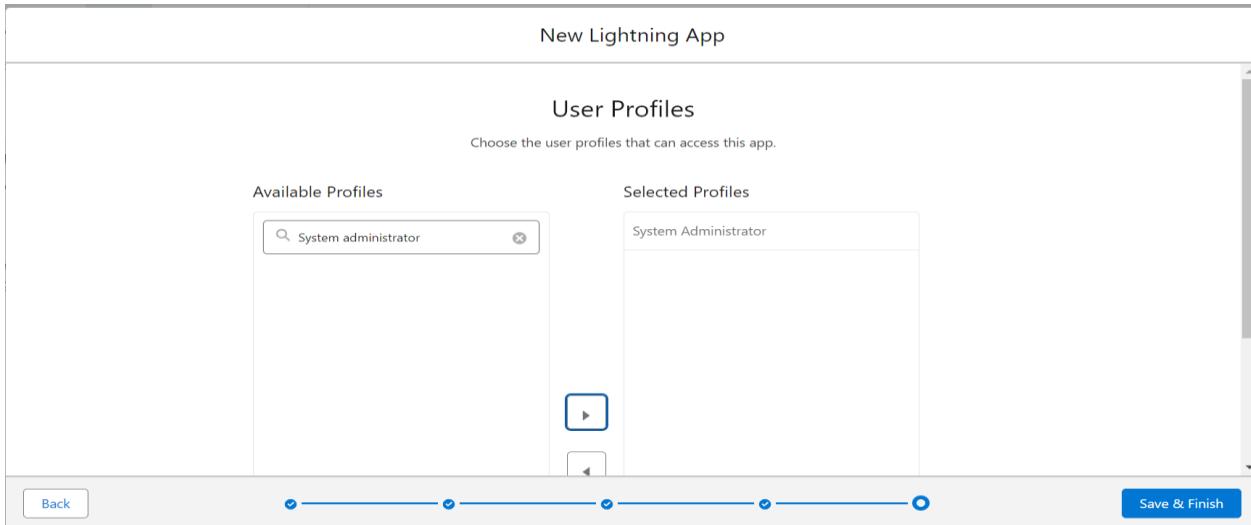
- Total Laptops
- consumer
- Laptop Bookings
- Billing Process

Back

Next

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4-->



Task 5: Fields

Fields represent the data stored in the columns of a relational database. It can also hold any valuable information that you require for a specific object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.

Types of Fields

1. Standard Fields

2. Custom Fields

a) Creating the field in consumer object

1. To create fields in an object:

Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the object. Now click on "Fields & Relationships" >> New

Select Data Type as a "Phone"

Click on next

Fill the Above as following:

Field Label: Phone number

Field Name : gets auto generated

Click the required option checkbox.

Click on Next >> Next >> Save and new.

The screenshot shows the Salesforce Setup interface for creating a new custom field. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main area is titled 'New Custom Field' for the 'consumer' object. The current step is 'Step 4. Add to page layouts'. The field details are: Field Label: 'Phone number', Data Type: 'Phone', Field Name: 'Phone_number'. A note says the field will be added as the last field in the first 2-column section of the selected page layouts. The 'consumer Layout' is selected. A note at the bottom says to click 'Save & New' to create more fields or 'Save' if done. Buttons at the bottom right include Previous, Save & New, Save, and Cancel.

Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the

2.creating email field

object.

Now click on “Fields & Relationships” >> New

Select Data type as a “Email” and Click on Next

Fill the Above as following:

Field Label: Email

Field Name :It's gets auto generated

Click on Next >> Next >> Save and new.

The screenshot shows the Salesforce Object Manager interface. The top navigation bar includes tabs for Student - Skill Wallet, Successful Purchase Confirmation, WhatsApp, consumer | Salesforce, and several other open tabs. The main header says "SETUP > OBJECT MANAGER" and "consumer". A sidebar on the left lists various setup options under "Fields & Relationships", such as Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Search Layouts, List View Button Layout, and Restriction Rules. The main content area is titled "New Custom Field" and "Step 4. Add to page layouts". It displays the following details:
Field Label: Email
Data Type: Email
Field Name: Email
Description:
Select the page layouts that should include this field. The field will be added as the last field in the first 2-column section of these page layouts. The field will not appear on any pages if you do not select a layout.
To change the location of this field on the page, you will need to customize the page layout.
 Add Field Page Layout Name
 consumer Layout
When finished, click Save & New to create more custom fields, or click Save if you are done.

Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the

3.creating Address field

object.

Now click on “Fields & Relationships” >> New

Select Data type as a “Text Area” and Click on Next

Fill the Above as following:

Field Label: Address

Field Name : It's gets auto generated

Select Required field.

Click on Next >> Next >> Save and new.

The screenshot shows the Salesforce Setup interface for creating a new custom field named 'Address' for the 'consumer' object. The 'Fields & Relationships' tab is selected in the sidebar. The main panel displays the 'Step 4. Add to page layouts' step of a four-step wizard. The field details are as follows:

Field Label	Address
Data Type	Text Area
Field Name	Address
Description	(empty)

The instructions advise selecting page layouts to include this field. A dropdown menu shows 'consumer Layout' selected. Buttons at the bottom right include 'Previous', 'Save & New' (highlighted), 'Save', and 'Cancel'.

Go to setup >> click on Object Manager >> type object name(consumer) in search bar >> click on the

4.creating consumer Status field

object.

Now click on “Fields & Relationships” >> New

Select Data type as a “Picklist” and Click on Next

Fill the Above as following:

Field Label: consumer Status

Value - Select enter values with each value separated by a new line

Student

Employee

Others

Select required

Field Name :It's gets auto generated

Click on Next >> Next >> Save and new.

b)Creating the field in Laptops Bookings object

1. To create fields in an object:

Go to setup >> click on Object Manager >> type object name(Laptop Bookings) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Picklist”

Picklist values are:-1.Dell 2. Acer 3.Hp 4.Mac

The screenshot shows the Salesforce Setup interface with the following details:

- Setup > OBJECT MANAGER**: The current page is "Laptop Bookings".
- Field Label**: Laptop Brands
- Values**:
 - Use global picklist value set
 - Enter values, with each value separated by a new line
- Value Entries**: Dell, Acer, Hp, Mac
- Field Name**: Laptop_names
- Description**: (empty)
- Help Text**: (empty)
- Required**: Always require a value in this field in order to save a record
- Auto add to custom report type**: Add this field to existing custom report types that contain this entity

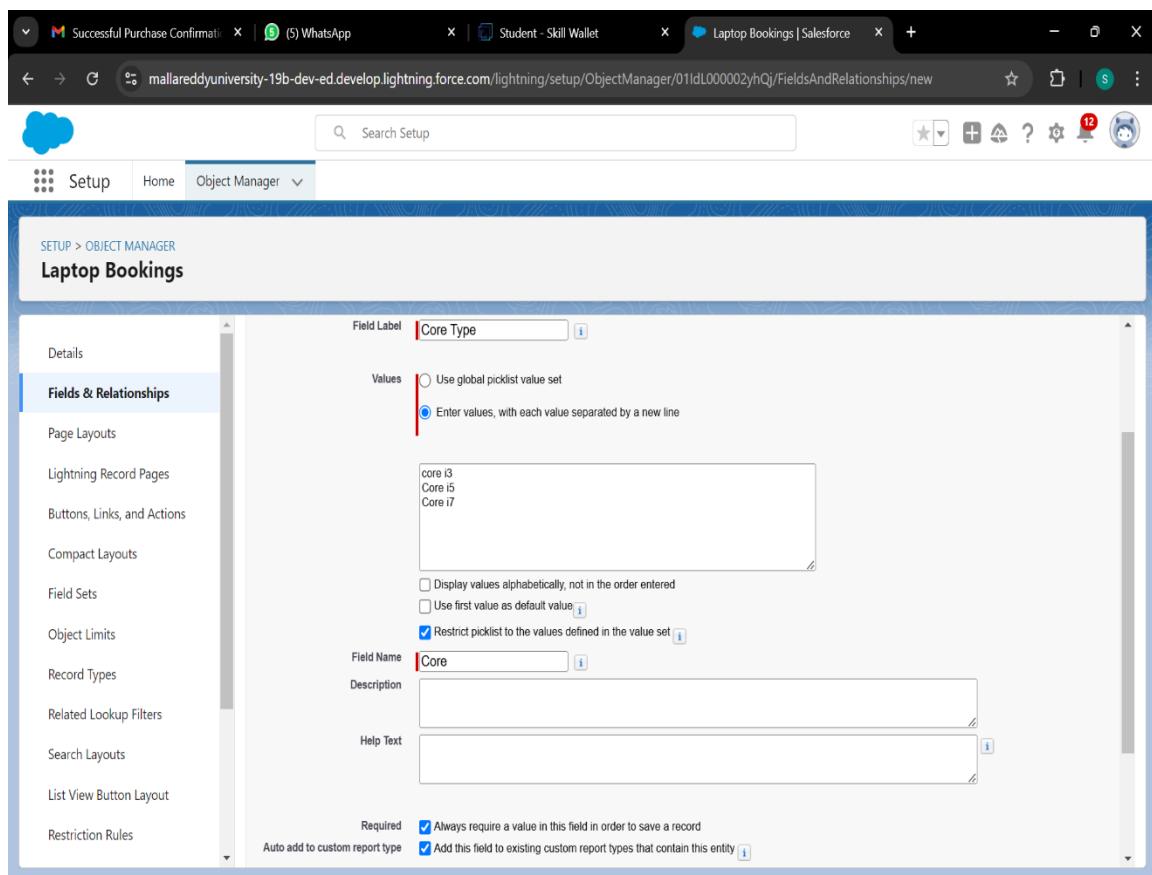
Select required

Click on Next >> Next >> Save and new

2. To Create a Fields & Relationship to an Laptop Booking Object

To create fields & relationship to an object:

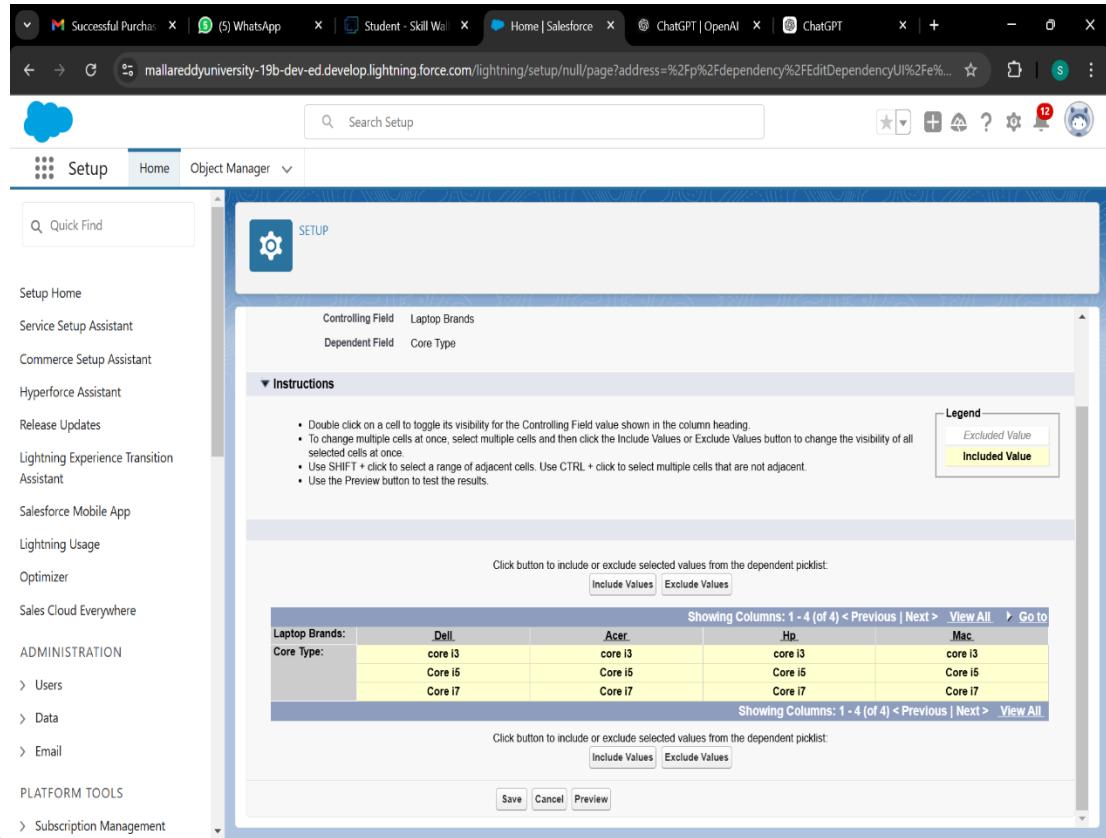
- 1.Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.
- 2.Now click on “Fields & Relationships” >> New
- 3.Select Data Type as a “Picklist”
- 4.Picklist values are:-1.core i3 2. Core i5 3. Core i7 .
- 5.Select required
- 6.Click on Next >> Next >> Save and new



c)To Create a Fields & Relationship to an Laptop Booking Object

To create fields & relationship to an object:

- 1.Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.
- 2.click field dependency and next
3. Click the include value for dell-core i3,i5,i7 and for acer i3,i4,i5 and for hp i3,i4,i5 and also for mac bionic chip include the values for it.



Click save.

d) To Create a Fields & Relationship to an Laptop Booking Object

1. To create fields & relationship to an object:

Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Lookup Relationship”

Click on Next

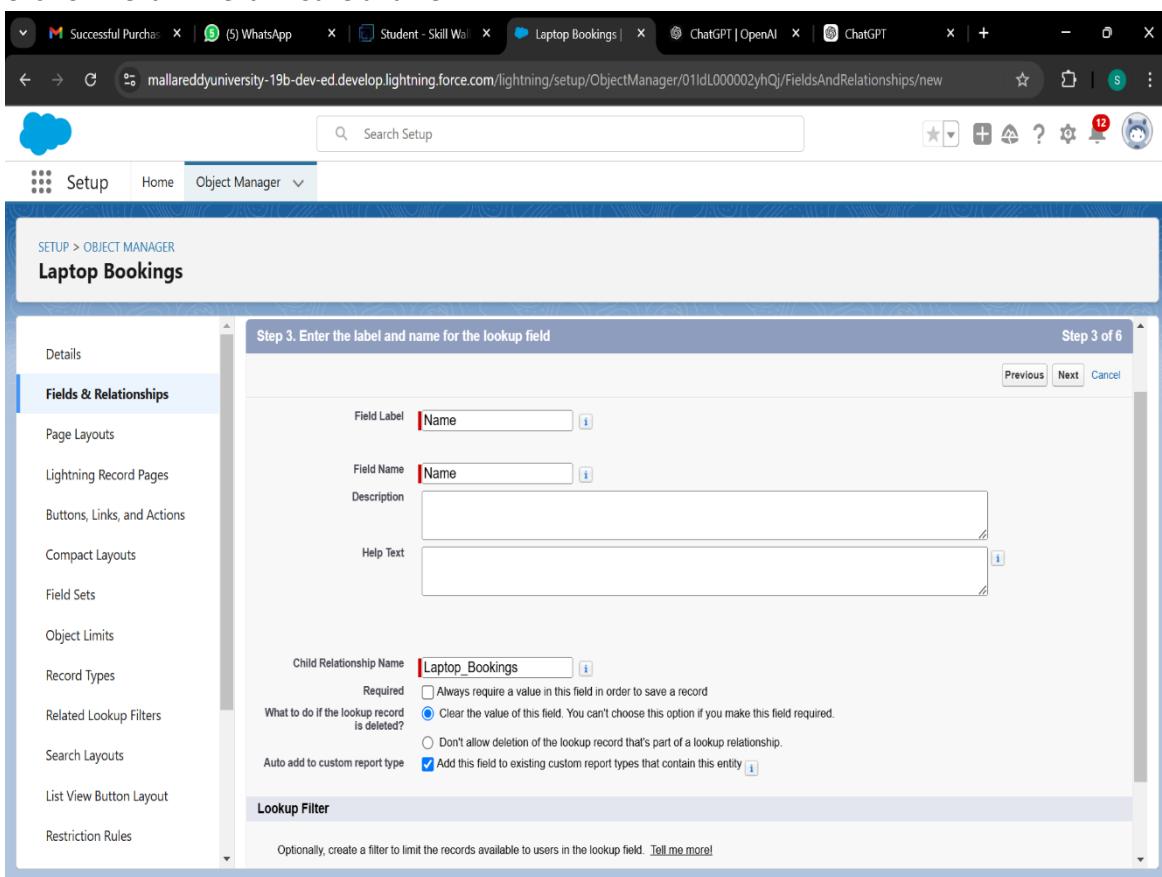
Click on the Related to drop down and Select the “consumer” object and click on Next

Fill the Above as following:

Change the Field Label: Name

Field Name :It's gets auto generated

Click on Next >> Next >> Save and new.



2.To create fields in an object:

1.Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.

3.Now click on “Fields & Relationships” >> New

4.Select Data Type as a “Currency”

5.Click on Next

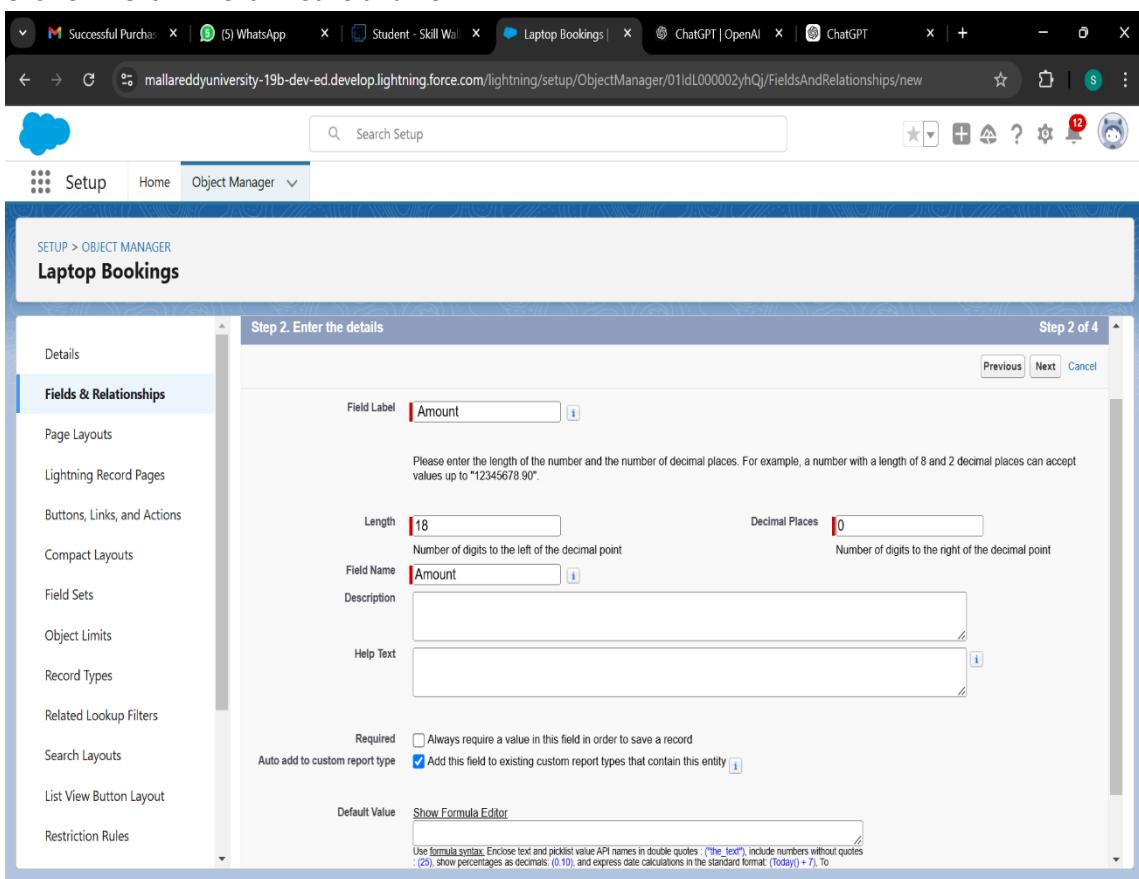
Fill the Above as following:

Field Label: Amount

Length: (18,0)

Field Name :It's gets auto generated

Click on Next >> Next >> Save and new



3.To Create a Fields & Relationship to an Object

Go to setup >> click on Object Manager >> type object name(Laptop Booking) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Lookup Relationship”

Click on Next

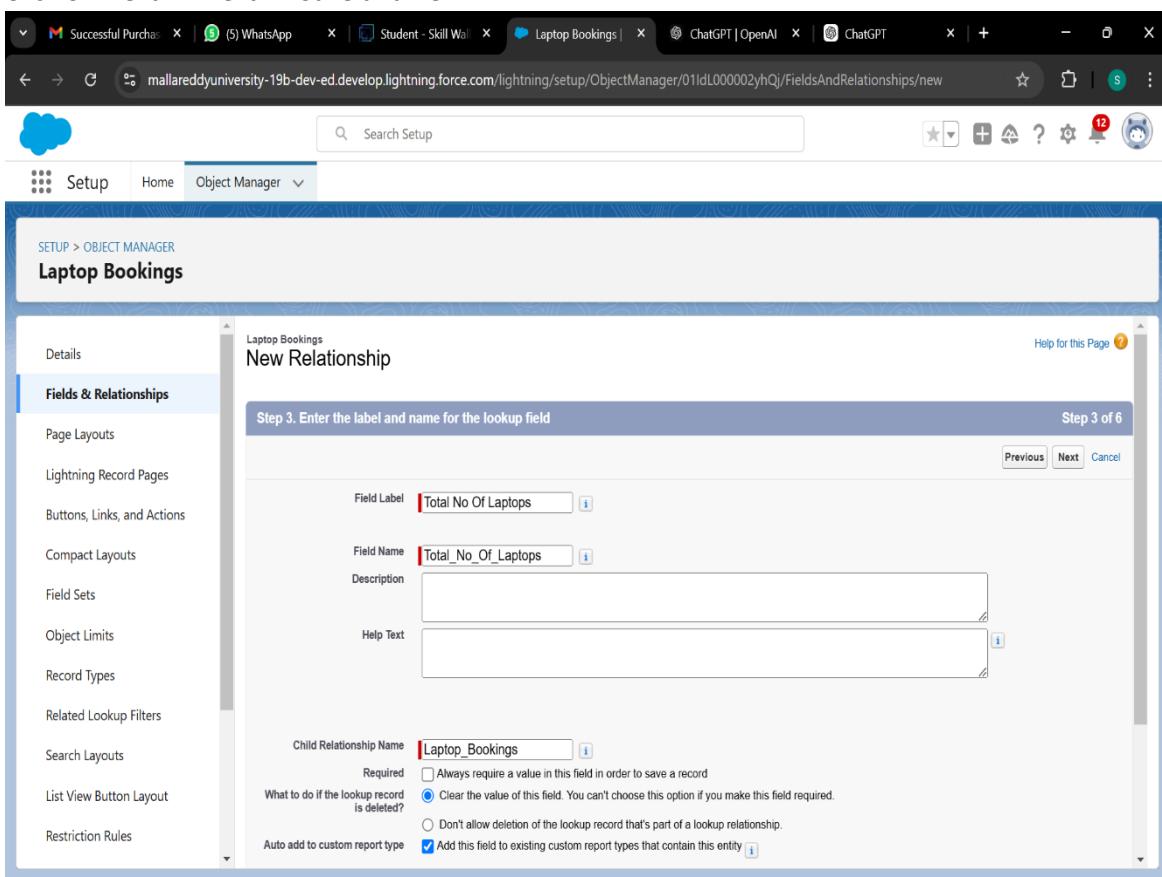
Click on the Related to drop down and Select the “Total Laptops” object and click on Next

Fill the Above as following:

Change the Field Label: Total No Of Laptops

Field Name :It's gets auto generated

Click on Next >> Next >> Save and new.



4. To Create a Fields & Relationship to an Laptop Bookings Object

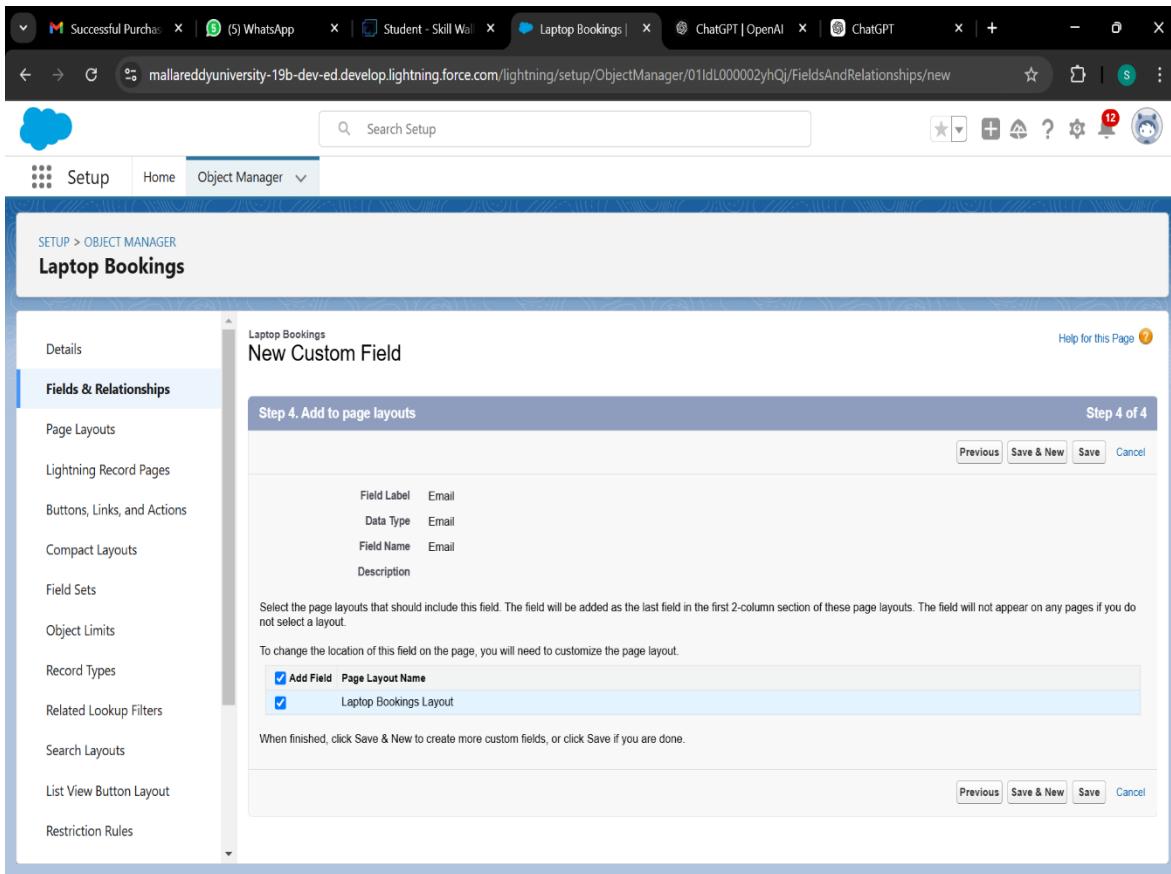
To create fields & relationship to an object:

Go to setup >> click on Object Manager >> type object name(Laptop Bookings) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Email”

Click on Next and save it.



5.To Create a Rollup Summary Field in “Total Laptops Object”

After Creating the Lookup Relationship Than Only you can create the Rollup Summary

Go to setup >> click on Object Manager >> type object name(Total Laptops) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data type as a “Roll-up Summary” and Click on Next

Fill the Above as following:

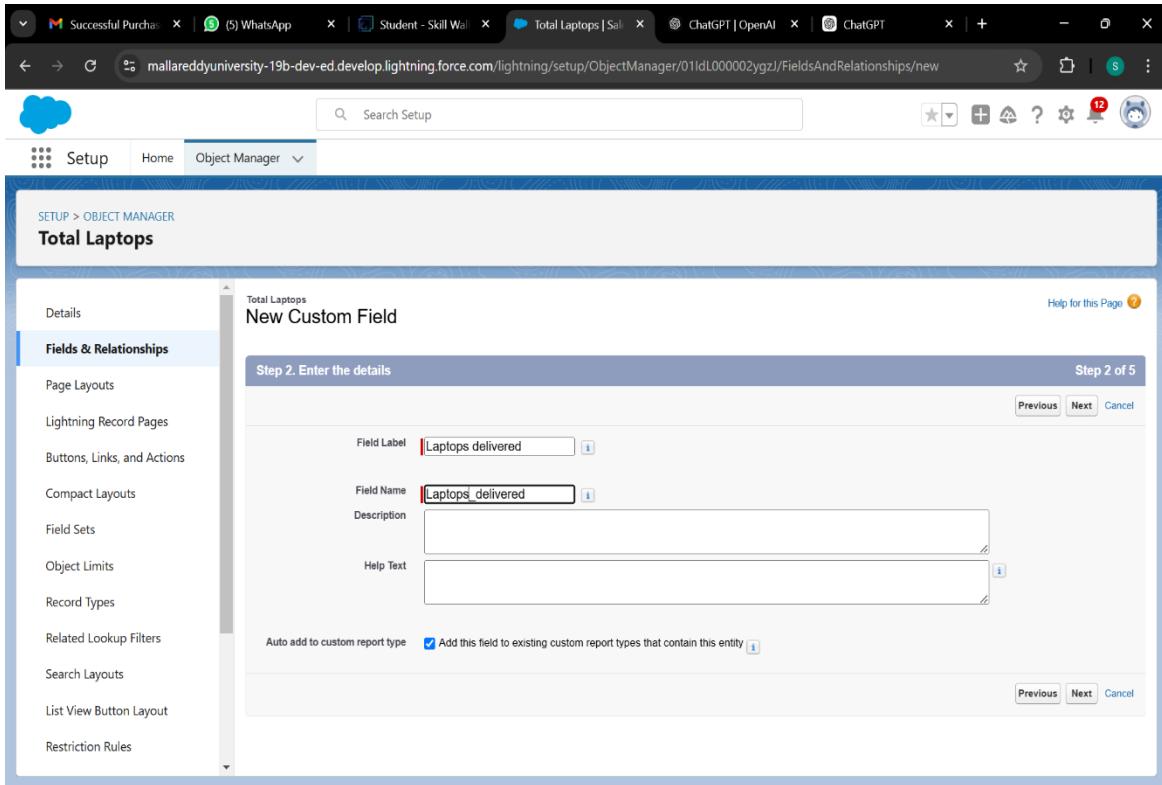
Field Label: Laptops delivered

Field Name :It's gets auto generated

Click on Next

Select the Laptop Bookings in the Summarized Object

Select the count Radio button in the select Roll-up Type



6. To create fields in an object:

Go to setup >> click on Object Manager >> type object name(Laptop Bookings) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data type as a “Formula” and Click on Next

Fill the Above as following:

Field Label: Laptops Available

Field Name : It's gets auto generated

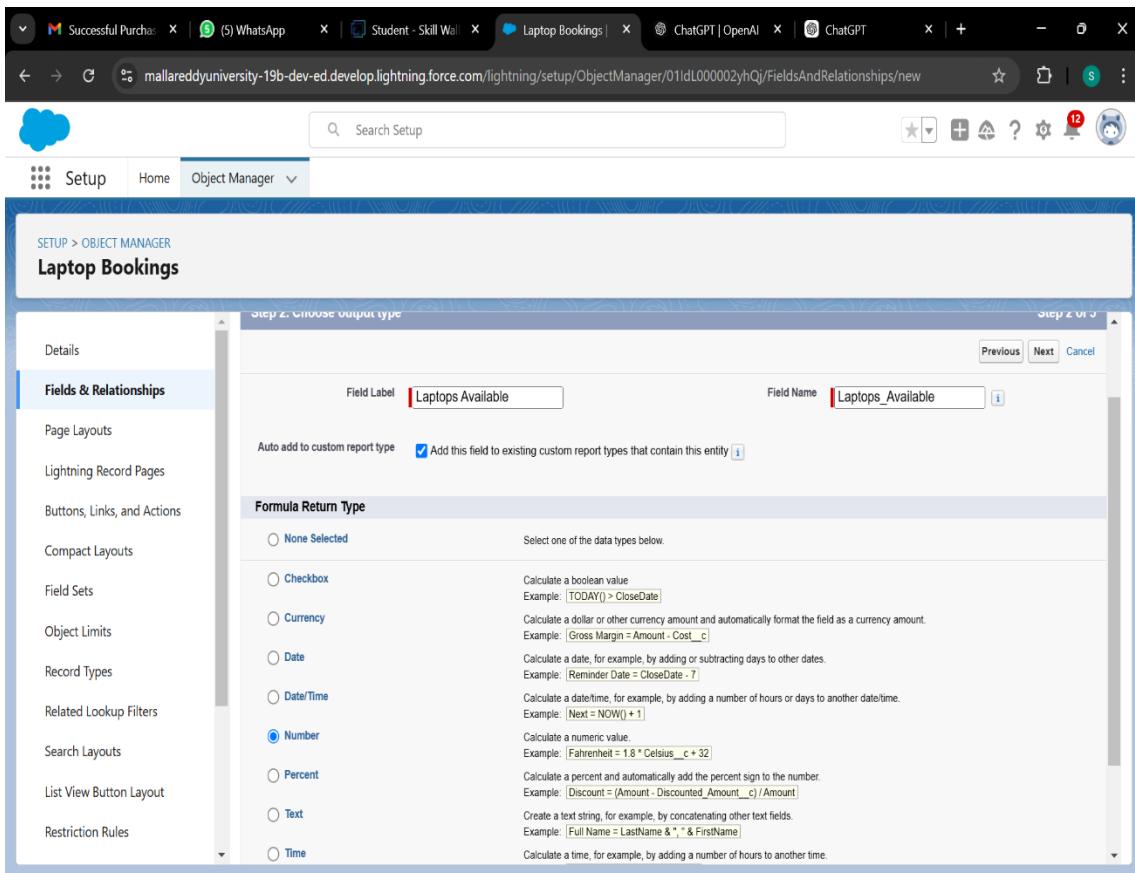
Select the Formula Return Type as “Number”

Select the Decimal places as “0” and Click on Next

Click on the Advanced Formula and Enter the value in formula box “ 50 - ” and Click on insert field than you will find a pop window under the Laptop Booking select the Total No Of Laptops in the second Column and select the Laptops delivered in the third column and click on insert

“ 50 - Total_no_of_laptops__r.Laptops_delivered__c ” and Check Syntax

Click on Next >> Next >> Save and new



7. To create fields in an object:

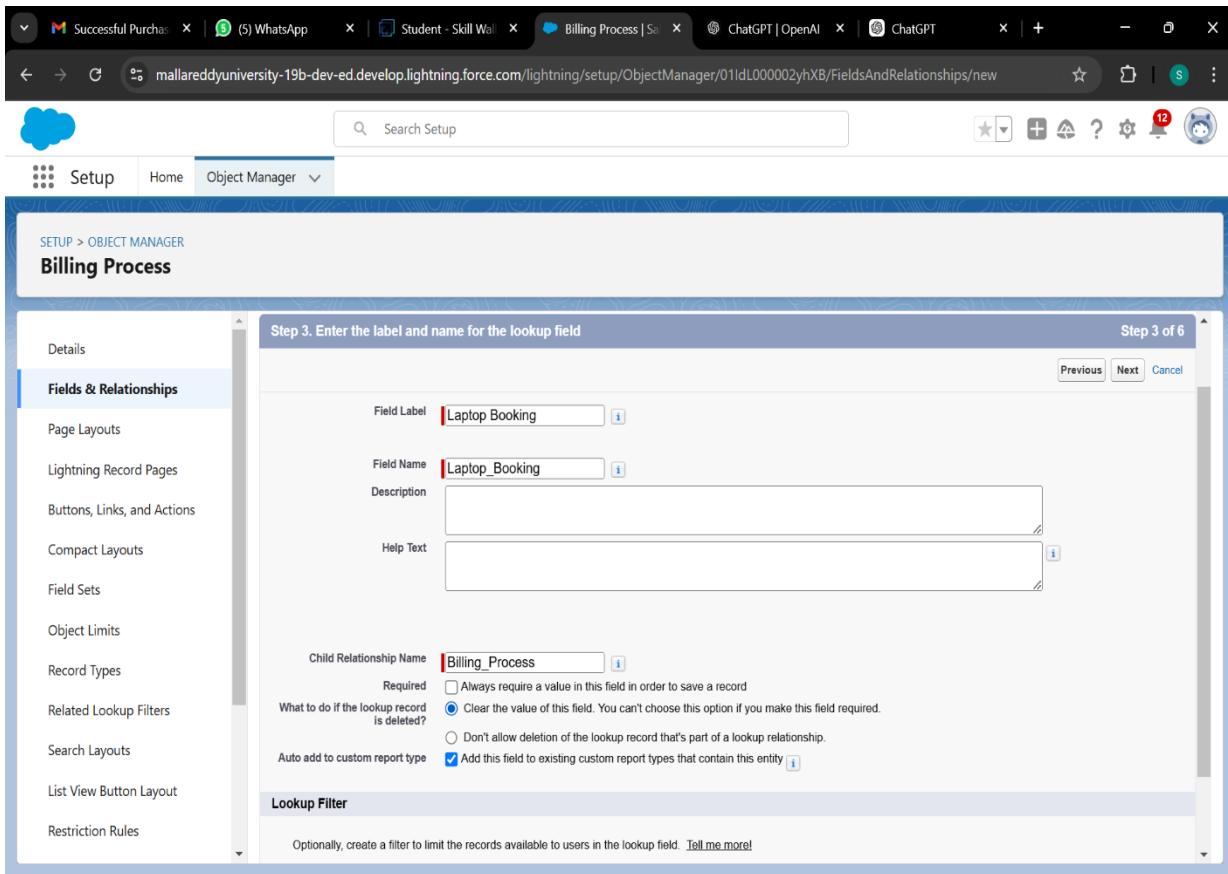
1.Go to setup >> click on Object Manager >> type object name(Laptop Bookings) in the 2.search bar >> click on the object.

3.Now click on “Fields & Relationships” >>New

4.Select Data Type as a “picklist”

Picklist values are 1.2.3.4.5

Click and save it.



e) Creation of Fields & Relationship for Billing Process Object

1. To create fields & relationship to an object:

Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Master-detail Relationship”

Click on Next

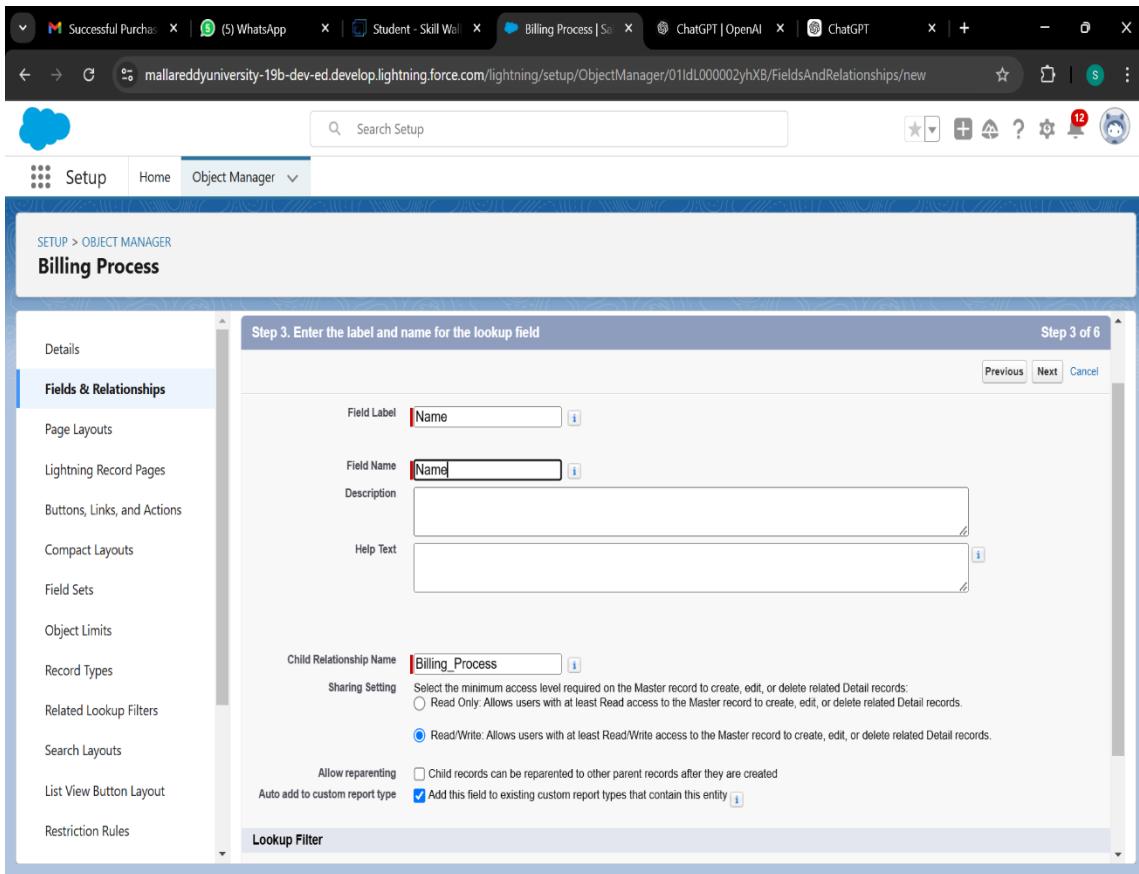
Click on the Related to drop down and Select the consumer object and click on Next

Fill the Above as following:

Change the Field Label: Name

Field Name :It's gets auto generated

Click on Next >> Next >> Save and new.



2. To create another fields & relationship to an object:

Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Lookup Relationship”

Click on Next

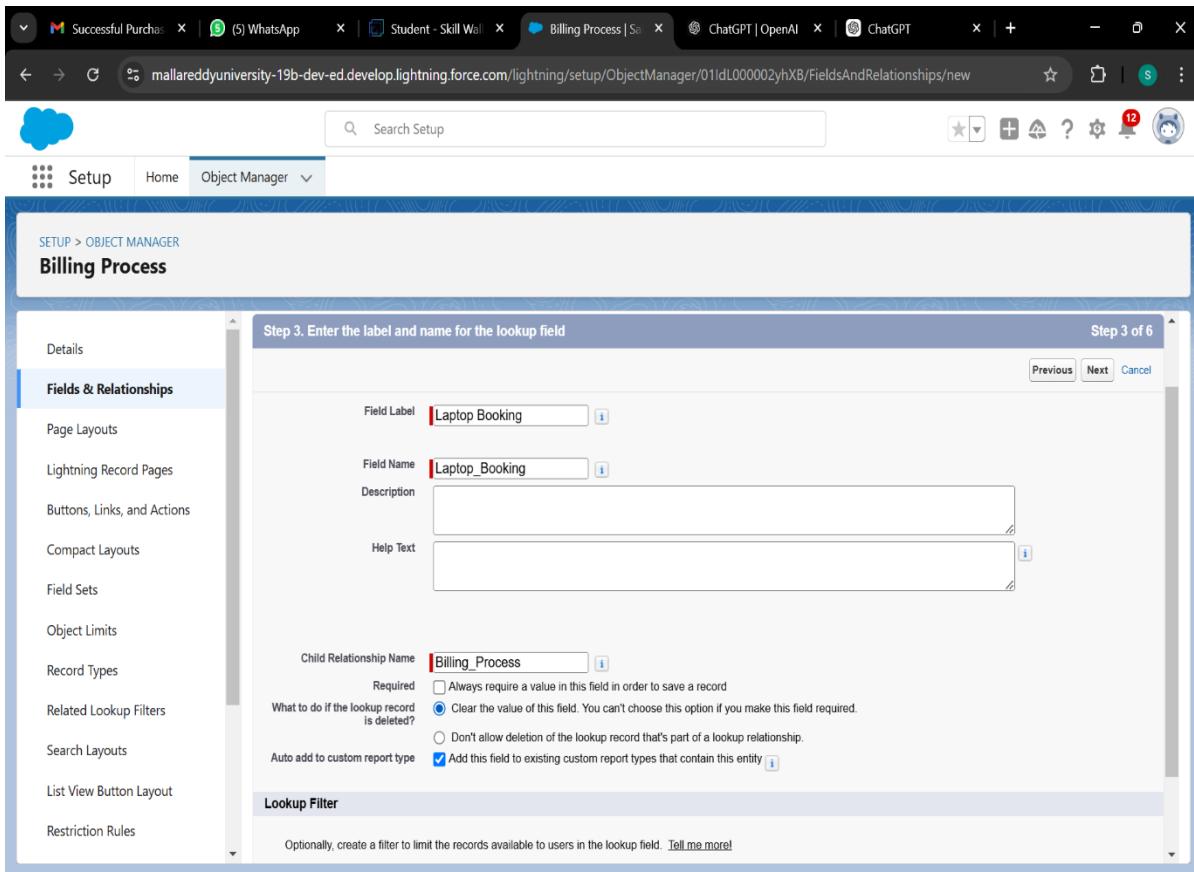
Click on the Related to drop down and Select the Laptop Booking object and click on Next

Fill the Above as following:

Change the Field Label: Laptop Booking

Field Name :It's gets auto generated

Click on Next >> Next >>Save and new.



3. Creation of another fields for the billing process object

To create fields in an object:

Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Picklist”

Fill the Above as following:

Field Label: Payment Mode

Value >> Select enter values with each value separated by a new line

Cash

Check

Credit card

Debit card

UPI

Phonepe

Gpay

Paytm

Select required

Click on Next >> Next >> Save and new.

The screenshot shows the Salesforce Object Manager interface for creating a new field. The left sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, etc. The main area is titled 'Billing Process' and shows the configuration for a new field:

- Field Label:** Payment Mode
- Values:** A picklist with items: Check, Credit card, Debit card, UPI, Phonepe, Gpay, Paytm. The 'Enter values, with each value separated by a new line' option is selected.
- Field Name:** Payment_Mode
- Description:** (empty)
- Help Text:** (empty)
- Required:** checked

4. Create a Cross object formula Field in billing process Object

Go to setup >> click on Object Manager >> type object name(Billing Process) in the search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data Type as a “Formula”

Click on Next

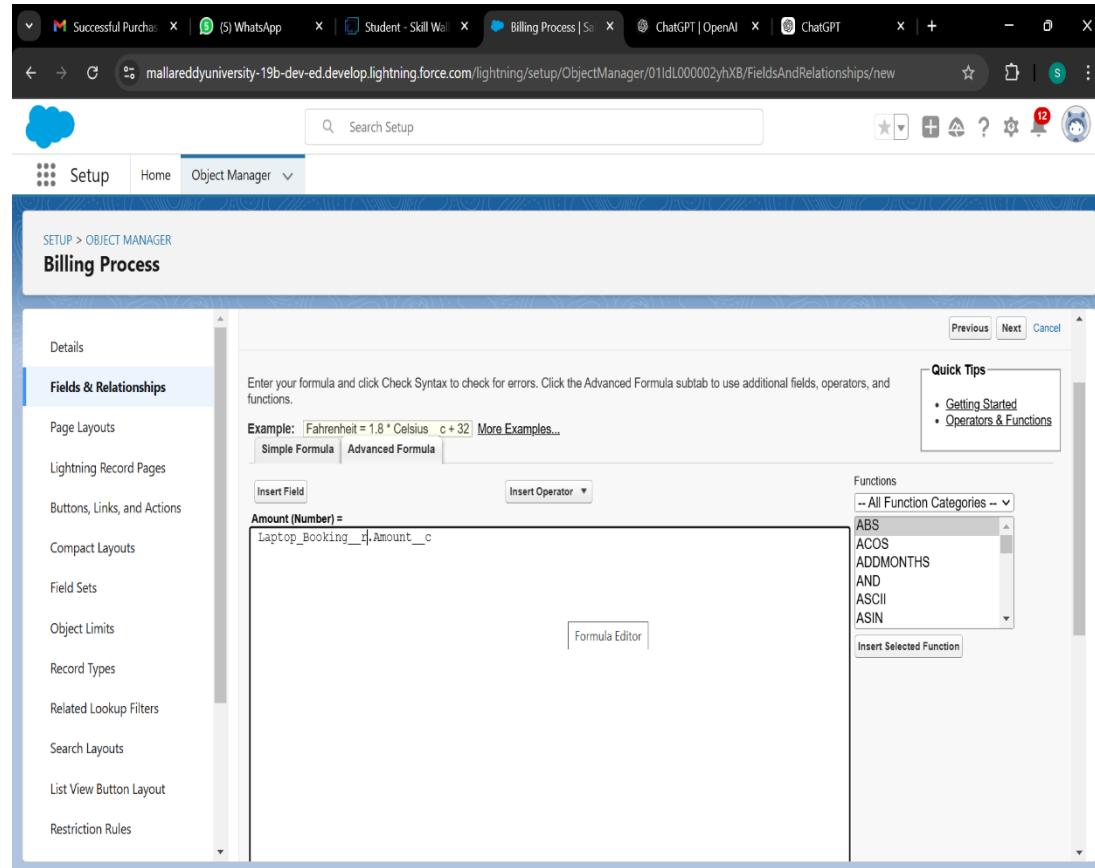
Enter the Field label: Amount, the Field name gets auto generated and click on Next.(Formula return type Number).

In the Advanced Formula Click on the Insert field in the popup Screen Select the Billing Process and in the second drop down select the Laptop Booking and in the three drop down select the Amount field and click on Insert

“Laptop_Booking__r.Amount__c”.

Click on the Check syntax: No syntax errors in merge fields

Click on Next >> Next >> Save and new.



f)Creating the field in Total Laptops object

1. To create fields in an object:

Go to setup >> click on Object Manager >> type object name(Total Laptops) in search bar >> click on the object.

Now click on “Fields & Relationships” >> New

Select Data type as a “Formula” and Click on Next

Fill the Above as following:

Field Label: Laptops Available

Field Name : It's gets auto generated

Select the Formula Return Type as “Number”

Select the Decimal places as “0” and Click on Next

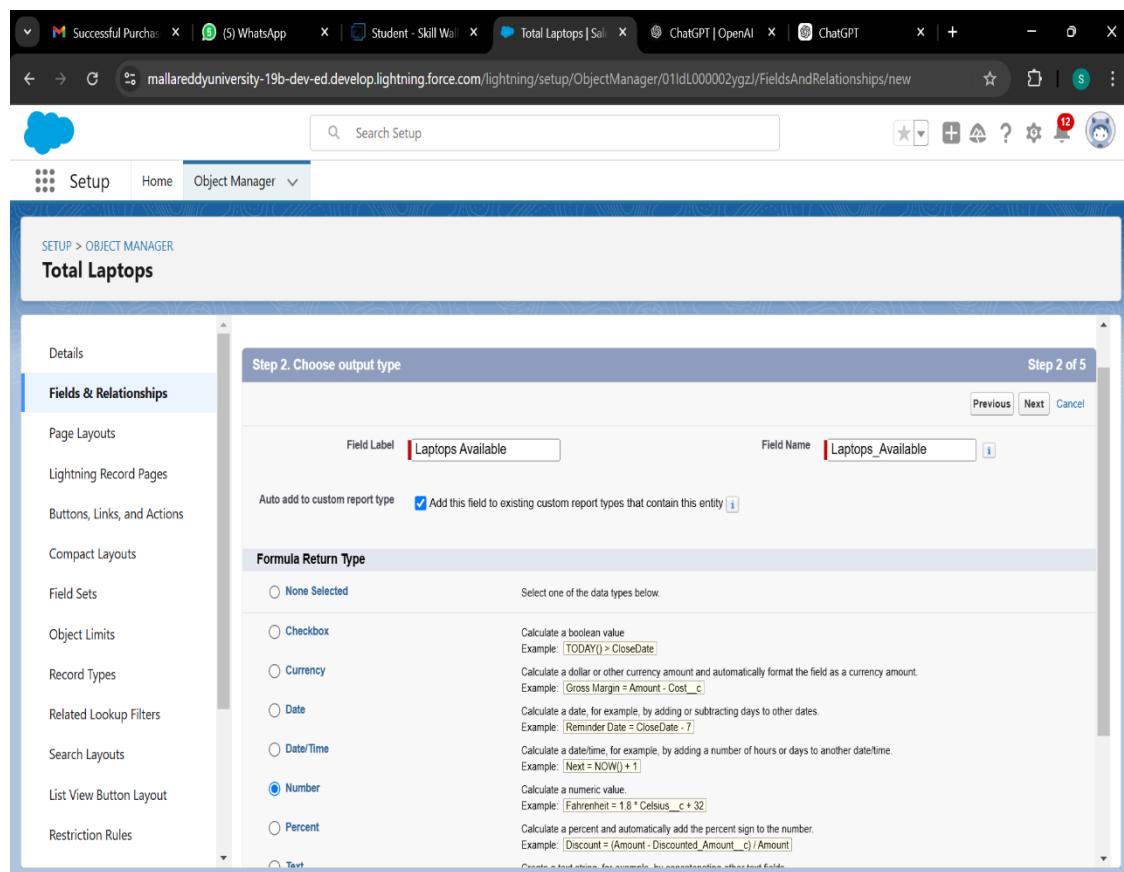
Note: I am Considering “Total No Of Laptops = 50” While creating a new record in Total Laptops

Object.

Click on the Advanced

Formula “ 50 - Laptops_delivered__c ” and Check Syntax

Click on Next >>Next >>Save and new.



Task 6: Validation rule

Go to the setup page - click on object manager - From drop down click edit for consumer object.

Click on the validation rule - click New.

Enter the Rule name as "Phonenumberoremailblankrule".

Enter the description as "phone number and email number should not be blank".

Enter the formula as "OR(ISBLANK(phone_number__c), ISBLANK(email__c))" and check the syntax.

Save the validation rule.

The screenshot shows the Salesforce Setup interface. The top navigation bar includes tabs for Home, Object Manager, and a search bar. Below the navigation is a sidebar with various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area is titled 'SETUP > OBJECT MANAGER consumer'. It displays a form for creating a validation rule. The 'Rule Name' field contains 'Phonenumberoremailblankrule', 'Active' is checked, and the 'Description' field contains 'phone number and email number should not be blank'. The 'Error Condition Formula' section contains the formula 'OR(ISBLANK(Phone_number__c), ISBLANK(Email__c))'. A dropdown menu for functions is open, showing options like ABS, ACOS, ADDMONTHS, AND, ASCII, ASIN, etc. The 'Error Message' section is currently empty. A 'Check Syntax' button is visible at the bottom of the formula input area.

Task 7 :Profiles

a)owner Profile

To create a new profile:

Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Standard User) >> enter profile name (owner) >> Save. scroll down to Custom Object Permissions and Give access permissions for Total Laptops, consumers , Laptop Booking and Billing Process objects

Give Access and Save it.

The screenshot shows the Salesforce Setup interface with the 'Profiles' page open. The 'Custom Object Permissions' section is the primary focus, displaying access levels for four objects: Billing Process, consumer, Laptop Bookings, and Total Laptops. Under 'Billing Process', both 'Read' and 'Create' checkboxes are checked. Under 'consumer', all checkboxes are checked. Under 'Laptop Bookings', 'Read', 'Create', 'Edit', 'Delete', and 'View All' checkboxes are checked. Under 'Total Laptops', all checkboxes are checked. Below this, the 'Session Settings' and 'Password Policies' sections are visible, though less relevant to the current task. The 'Session Settings' section shows a session timeout of '2 hours of inactivity'. The 'Password Policies' section includes settings like password expiration (90 days), history (3 passwords remembered), length (8 characters), complexity (must include alpha and numeric characters), and lockout (10 attempts). A global search bar at the top left and a navigation bar with tabs like 'Home' and 'Object Manager' are also visible.

b)Agent Profile

Go to setup >> type profiles in quick find box >> click on profiles >> clone the desired profile (Standard Platform User) >> enter profile name (Agent) >> Save.

While still on the profile page, then click Edit.

Scroll down to Custom Object Permissions and Give access permissions for Total Laptops, consumer , Laptop Bookings and Billing Process objects as mentioned in the below diagram. Give access and save it.

The screenshot shows the Salesforce Setup interface for managing Profiles. The left sidebar shows 'Users' and 'Profiles' selected. The main area displays the 'Profiles' setup page with sections for 'Incidents', 'Individuals', 'Inventory Reservations', 'Work Types', and 'Work Type Groups'. Below this is the 'Custom Object Permissions' section, which lists 'Billing Process', 'consumer', 'Laptop Bookings', and 'Total Laptops' with their respective permission checkboxes. Further down are 'Session Settings' and 'Password Policies' sections.

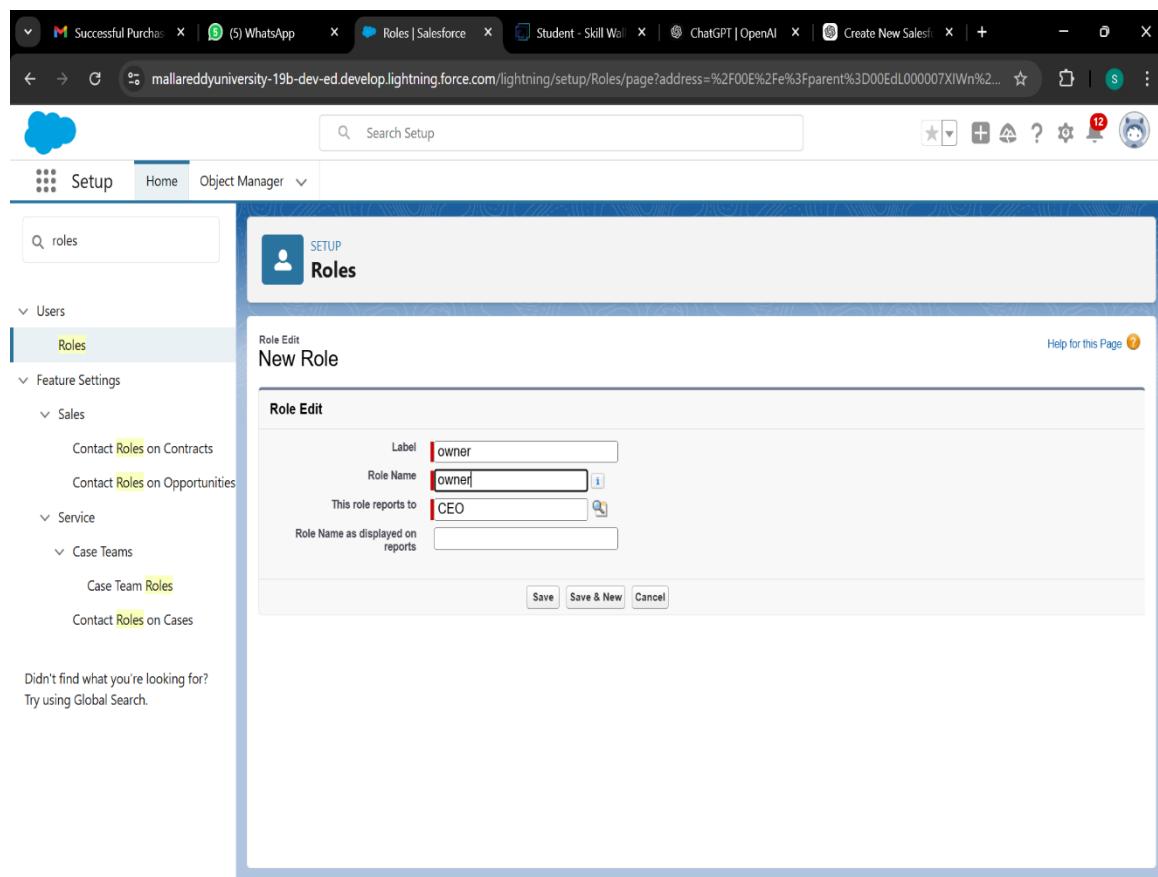
Task 8: Roles and Hierarchy

a)Creating owner Role:

Go to quick find >> Search for Roles >> click on set up roles.

Click on Expand All and click on add role under whom this role works.

Give Label as “owner” and Role name gets auto populated. Then click on Save. Click and save it.



b)Creating Agent roles

Creating another two roles under manager

Go to quick find - Search for Roles - click on set up roles.

Click plus on CEO role, and click add role under owner.

Give Label as "Agent" and Role name gets auto populated. Then click on Save.

The screenshot shows the Salesforce Setup interface. On the left, there's a sidebar with a search bar and sections for Users (Roles), Feature Settings (Sales, Service, Case Teams), and Contact Roles on Contracts, Opportunities, Cases, and Contracts. The main area is titled 'Role Edit' and shows a 'New Role' form. The 'Label' field contains 'Agent', and the 'Role Name' field also contains 'Agent'. The 'This role reports to' field has 'owner' selected. At the bottom, there are 'Save', 'Save & New', and 'Cancel' buttons.

Task 9:Users

Go to setup - type users in quick find box - select users -click New user.

Fill in the fields

First Name : vicky

Last Name : y

Alias : Give a Alias Name

Email id : Give your Personal Email id

Username : Username should be in this form: text@text.text

Nick Name : Give a Nickname

Role : owner

User license : Salesforce

Profiles : owner. save it.

The screenshot shows the Salesforce Setup interface with the 'Users' tab selected in the sidebar. The main window displays the 'New User' creation page. The 'General Information' section is filled with the following data:

Field	Value
First Name	vicky
Last Name	y
Alias	vy
Email	shivakumaryadav357@gmail.com
Username	shivakumaryadav357@gmail.com
Nickname	vic
Title	
Company	
Department	
Division	
Role	owner
User License	Salesforce
Profile	Standard User
Active	✓
Marketing User	□
Offline User	□
Knowledge User	□
Flow User	□
Service Cloud User	□
Site.com Contributor User	□
Site.com Publisher User	□
WDC User	□
Data.com User Type	-None-
Data.com Monthly Addition Limit	Default Limit (300)
Accessibility Mode	□

Go to setup -type users in quick find box - select users -click New user.

Fill in the fields

First Name : ram

Last Name : ram

Alias : Give a Alias Name

Email id : Give your Personal Email id

Username : Username should be in this form: text@text.text

Nick Name : Give a Nickname

Role : Agent

User license : Salesforce platform

Profiles : standard platform user.

save it.

Task 10: Flows

a) Create a Flow on dell laptop

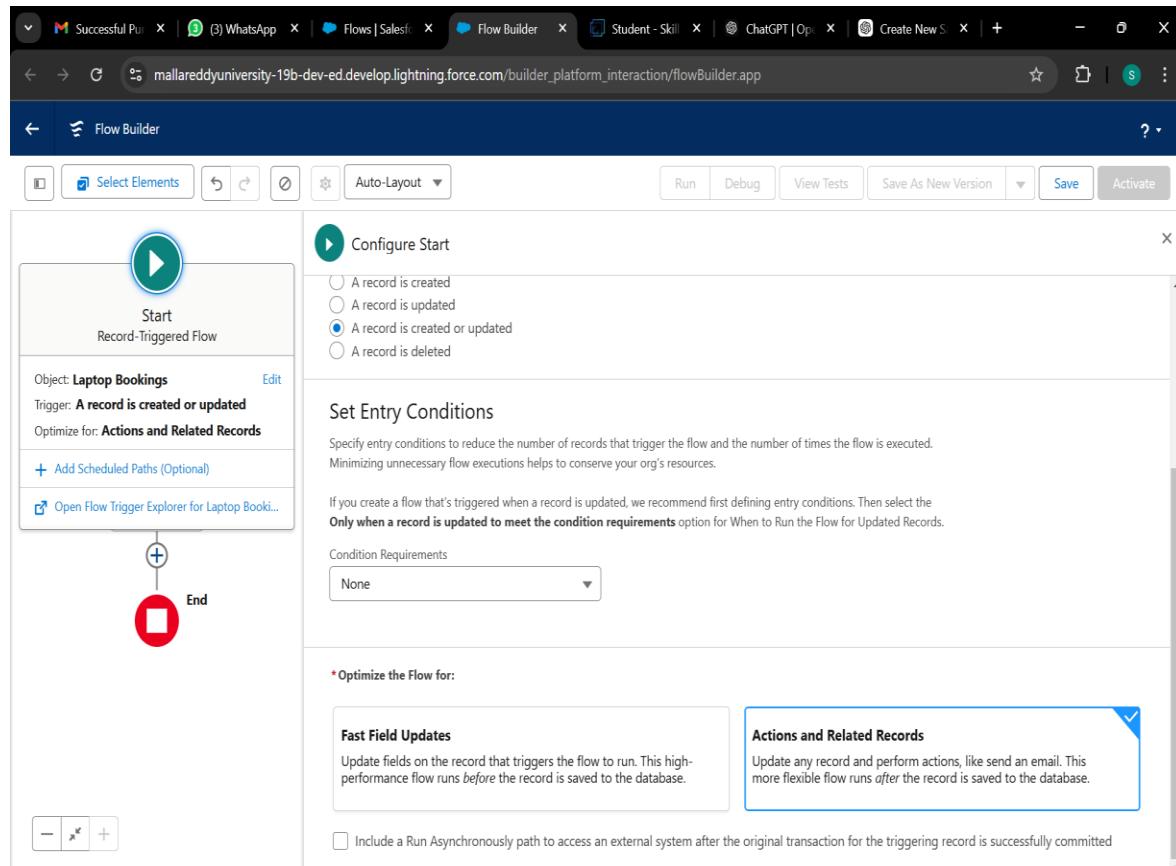
Go to setup >> type Flow in quick find box >> Click on the Flow and Select the New Flow.

Select the Record-triggered flow and Click on Create.

Select the Object as a Laptop Booking in the Drop down list.

Select the Trigger Flow when: "A record is Created or Updated".

Select the Optimize the flow for: "Actions and Related Records" and Click on Done.



Under the Record-triggered Flow Click on "+" Symbol and In the Drop down List select the Enter the Details Label: Field should be Update, API name: Gets Automatically Generated.

Enter the Outcome Details Label: laptop brands , Outcome API name: Gets Automatically Generated.

Resource: Select Record.Laptop booking__c.

Operator: Select Equals.

Value: Select dell

Add the same outcome order to acer , hp,mac.

Click done.

Go to flow page

Beside dell there is a symbol '+' click on that.

Again select decision

Enter the Details Label: Field should Update(any one u want), API name: Gets Automatically Generated.

select the Outcome Details Label: dell core i3 , Outcome API name: Gets Automatically Generated.

Resource: Select Record.core type.

Operator: Select Equals.

Value: Select core i3.

Then again click the symbol '+' outcome details

select the Outcome '+' Details Label: dell core i5 , Outcome API name: Gets Automatically Generated.

Resource: Select Record.core type.

Operator: Select Equals.

Value: Select core i5.

Then again click the symbol '+' outcome details

Enter the Outcome Details Label: dell core i7 , Outcome API name: Gets Automatically Generated.

Resource: Select Record.core type.

Operator: Select Equals.

Value: Select core i7.

Click done.

So go to the flow page select '+' after core i3 then again select the decision.

Enter the Details Label: months selected , API name: Gets Automatically Generated.

Enter the Outcome Details Label: dell 1(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: 1.

Enter the Outcome Details Label: dell 2(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 2..

Click '+' outcome details

Enter the Outcome Details Label: dell 3(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 3..

Click '+' outcome details

Enter the Outcome Details Label: dell 4(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 4..

Click '+' outcome details

Enter the Outcome Details Label: dell 5(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 4.

After dell 1(i3) there is '+' symbol like dell 2(i3),dell 3(i3),dell 4(i3),dell 5(i3).

Click on '+' then select update records

Enter the Details Label: one month of dell i3 rate , API name: Gets Automatically Generated. Field:-
Amount__c , value:- for dell 1(i3)-1000, dell 2(i3)-2000, dell 3(i3)-3000, dell 4(i3)-4000, dell 5(i3)-
5000. Follow for all these finally

Click done.

Enter the Details Label: months selected , API name: Gets Automatically Generated.

Enter the Outcome Details Label: dell 1(i7) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: 1.

Enter the Outcome Details Label: dell 2(i7) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 2..

Click '+' outcome details

Enter the Outcome Details Label: dell 3(i7) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 3..

Click '+' outcome details

Enter the Outcome Details Label: dell 4(i7) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 4.

Click '+' outcome details

Enter the Outcome Details Label: dell 5(i7) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

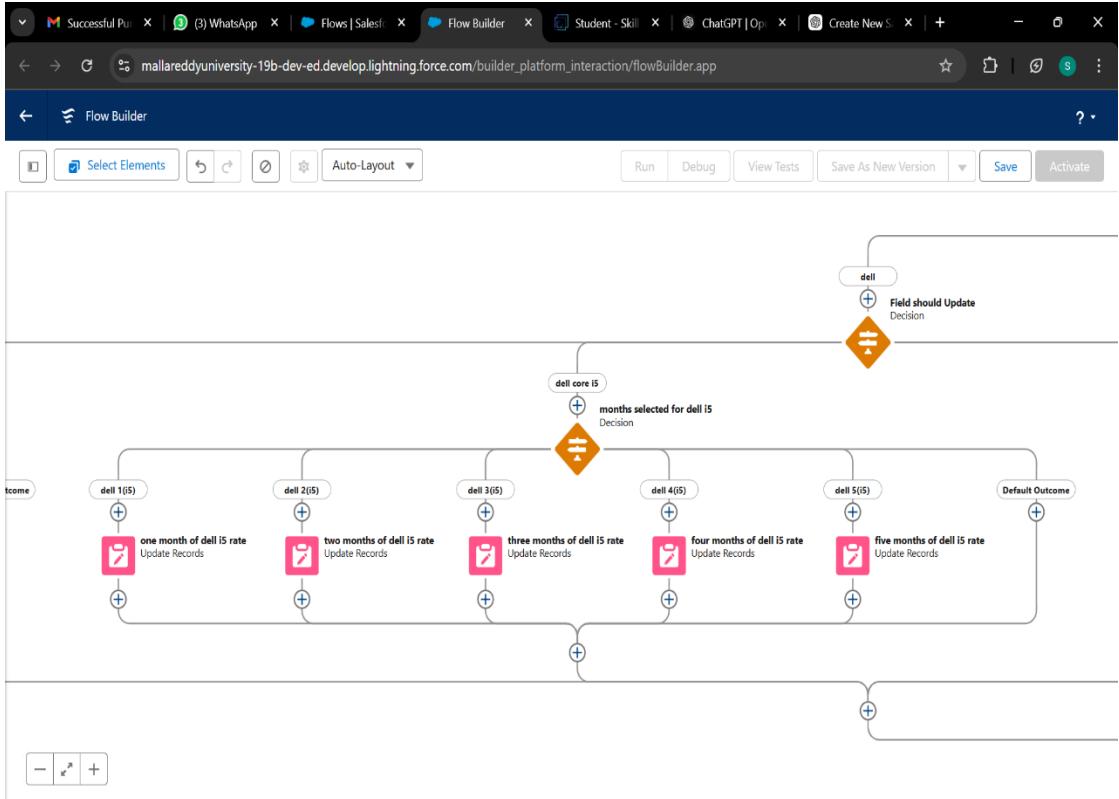
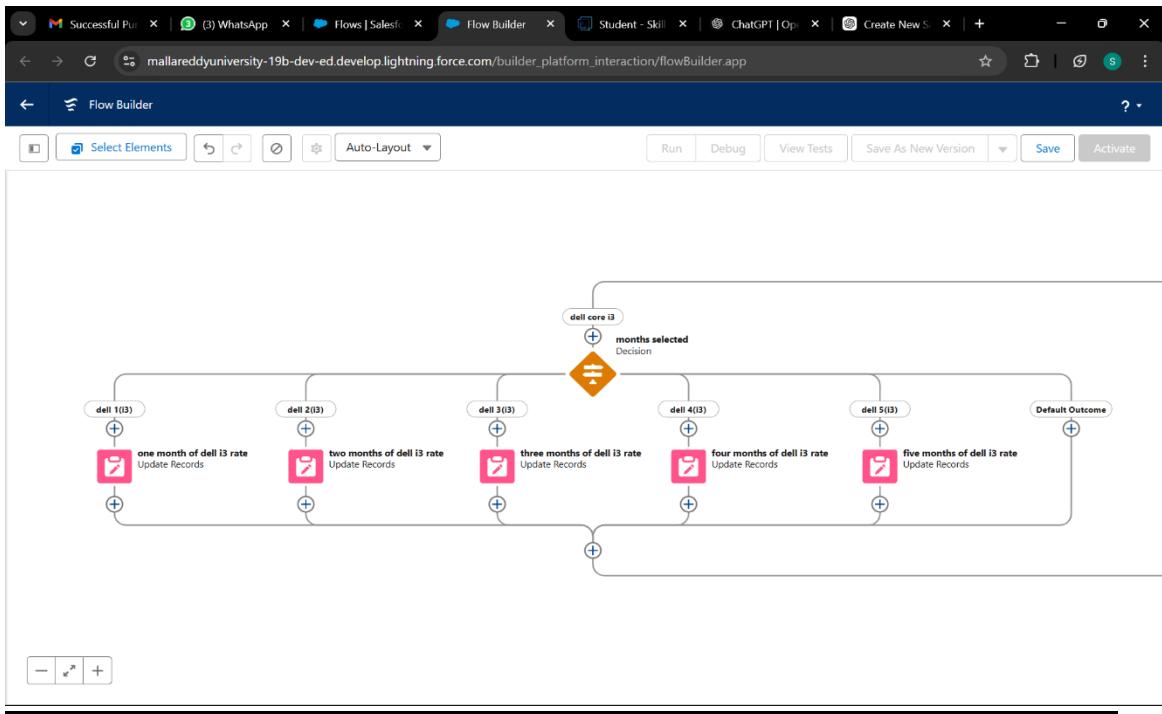
Value: Select 5.

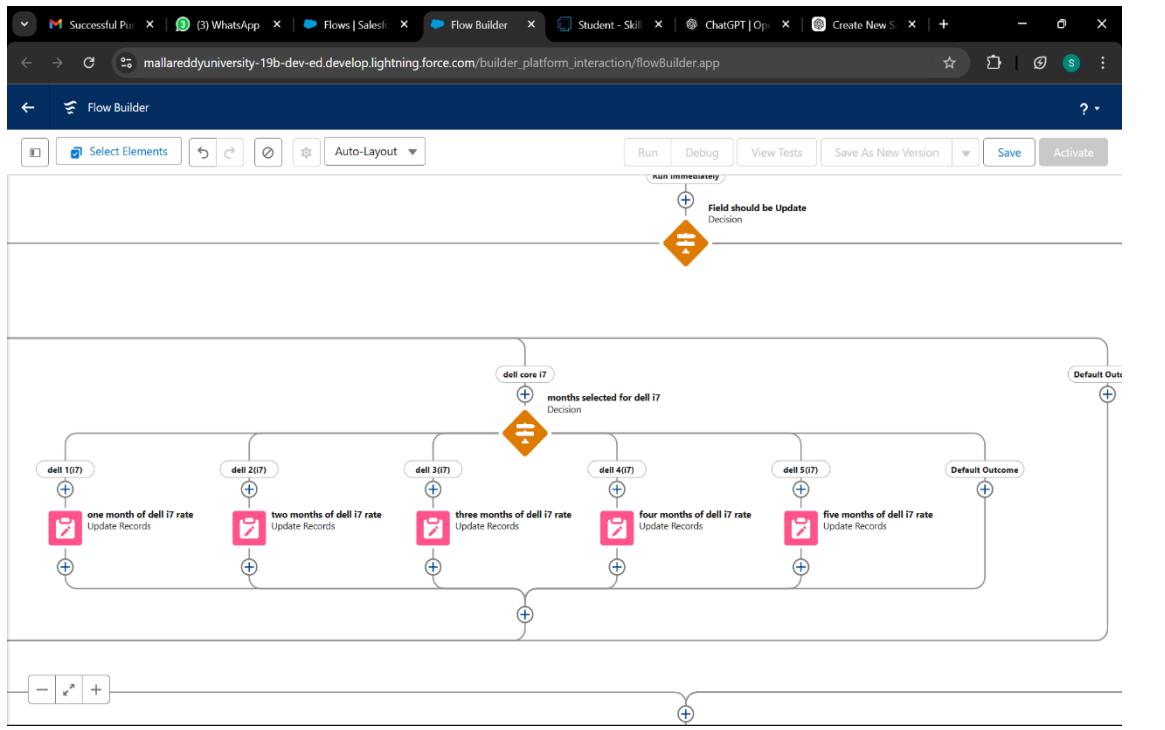
After dell 1(i7) there is '+' symbol like dell 2(i7),dell 3(i7),dell 4(i7),dell 5(i7).

Click on '+' then select update records

Enter the Details Label: one month of dell i5 rate , API name: Gets Automatically Generated. Field:-
Amount__c , value:- for dell 1(i7)-2000, dell 2(i7)-4000, dell 3(i7)-6000, dell 4(i7)-8000, dell 5(i7)-
10000. Follow for all these finally

Click done.





Decision

Label: months selected **API Name:** months_selected

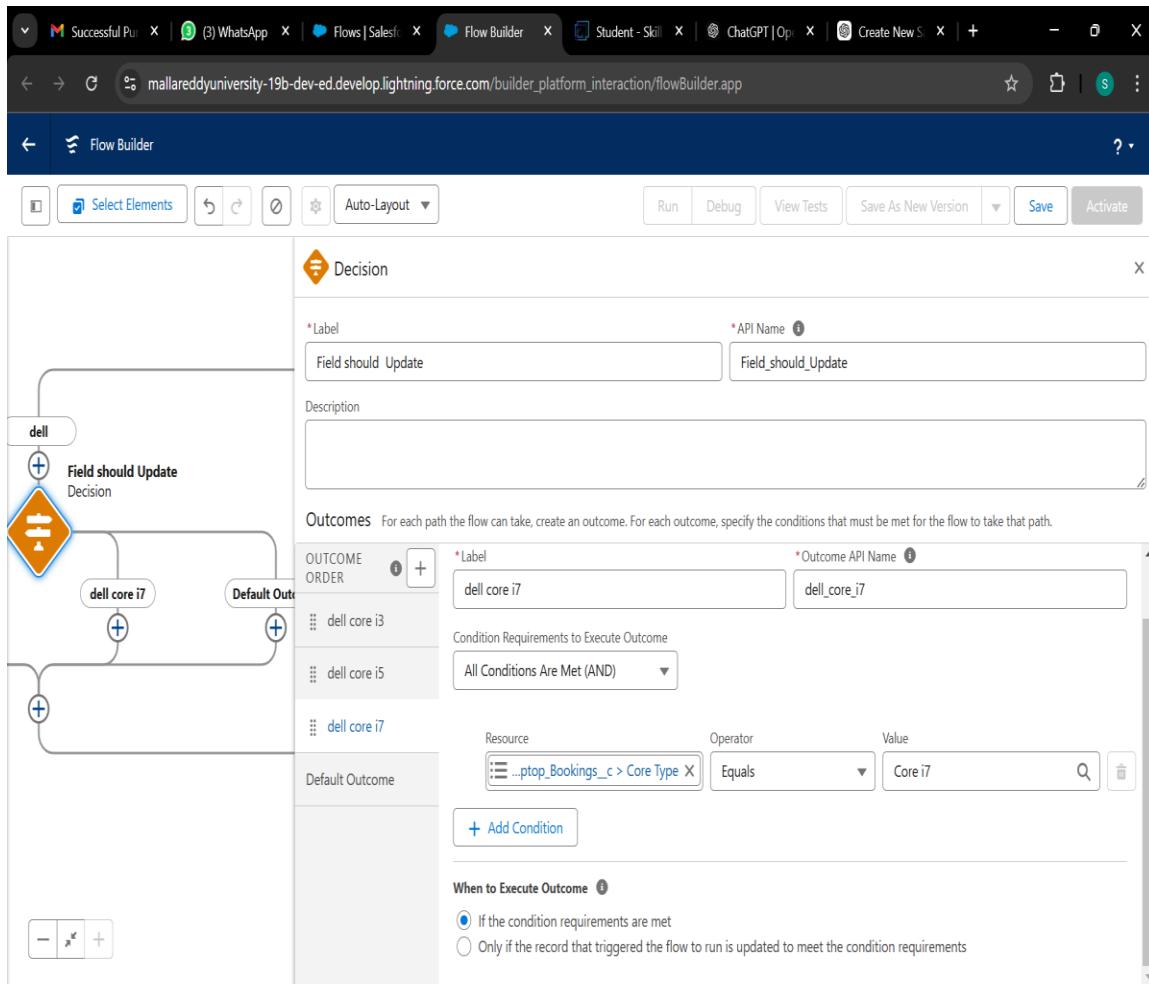
Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.

OUTCOME ORDER	Label	Outcome API Name
dell 5(i3)	dell 5(i3)	dell_5_i3
dell 2(i3)		
dell 3(i3)		
dell 4(i3)		
dell 5(i3)		
Default Outcome		

Condition Requirements to Execute Outcome: All Conditions Are Met (AND)

When to Execute Outcome:

- If the condition requirements are met
- Only if the record that triggered the flow to run is updated to meet the condition requirements



similarly, the same will be applied to dell 2,3,4,5 month rates with their respective rates as mentioned above.

Also, the same process will be applied for dell core i5,i7 with their 1,2,3,4,5 month rates values.

FLOW DIAGRAM FOR DELL:

b)creating flow on acer laptop

Go to flow page

Beside acer there is a symbol '+' click on that.

Again select decision

Enter the Details Label: Field is Update, API name: Gets Automatically Generated. select the Outcome Details Label: acer core i3 , Outcome API name: Gets Automatically Generated.

Resource: Select Record.core type.

Operator: Select Equals.

Value: Select core i3.

Click done.

Go to flow page

Beside dell there is a symbol '+' click on that.

Again select decision

Enter the Details Label: months selected , API name: Gets Automatically Generated.

Enter the Outcome Details Label: acer 1(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: 1.

Enter the Outcome Details Label: acer 2(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 2..

Click '+' outcome details

Enter the Outcome Details Label: acer 3(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 3..

Click '+' outcome details

Enter the Outcome Details Label: acer 4(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 4.

Click '+' outcome details

Enter the Outcome Details Label: acer 5(i3) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

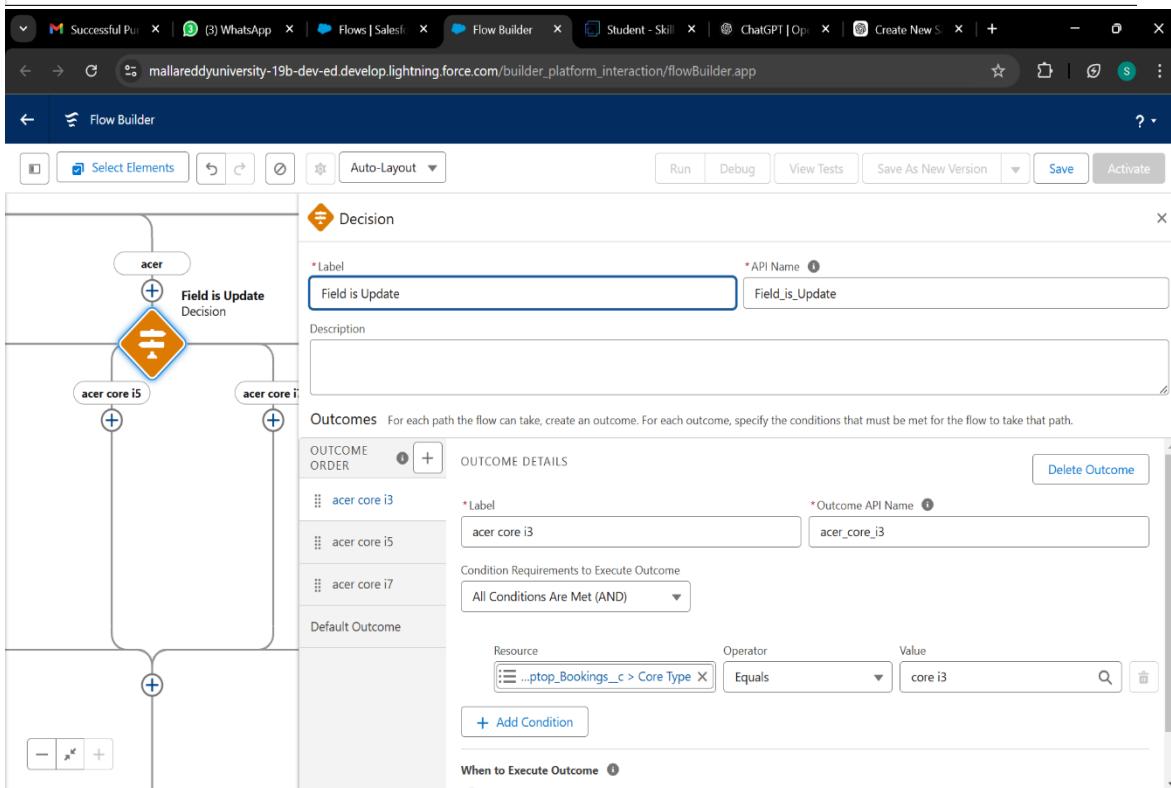
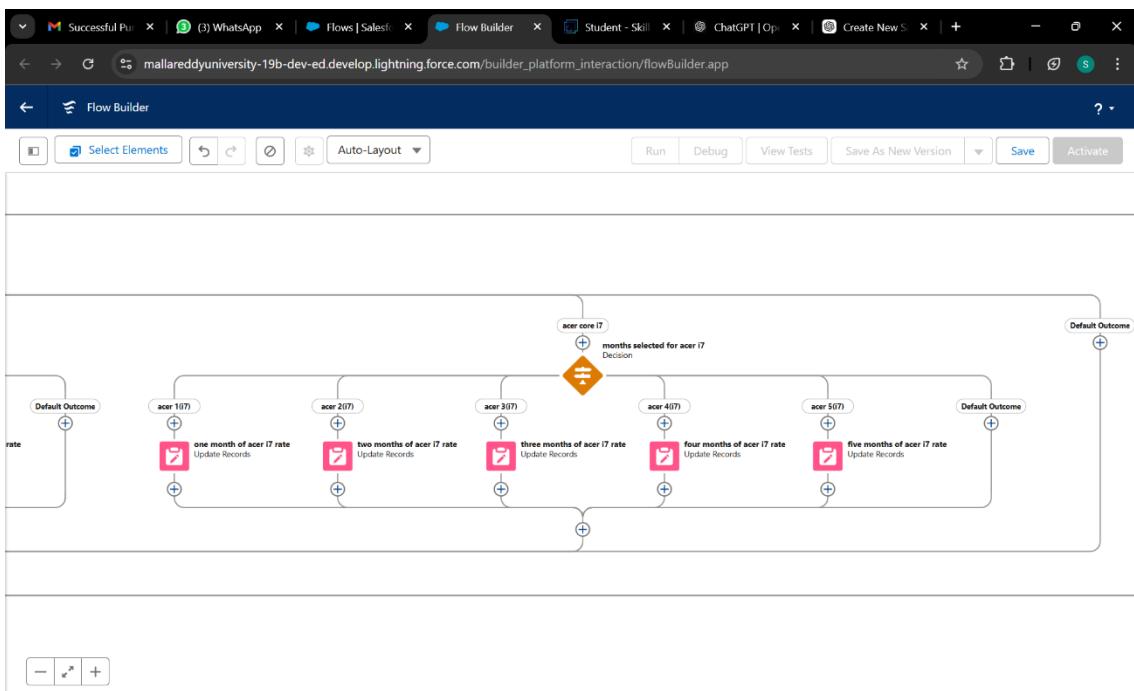
Value: Select 5.

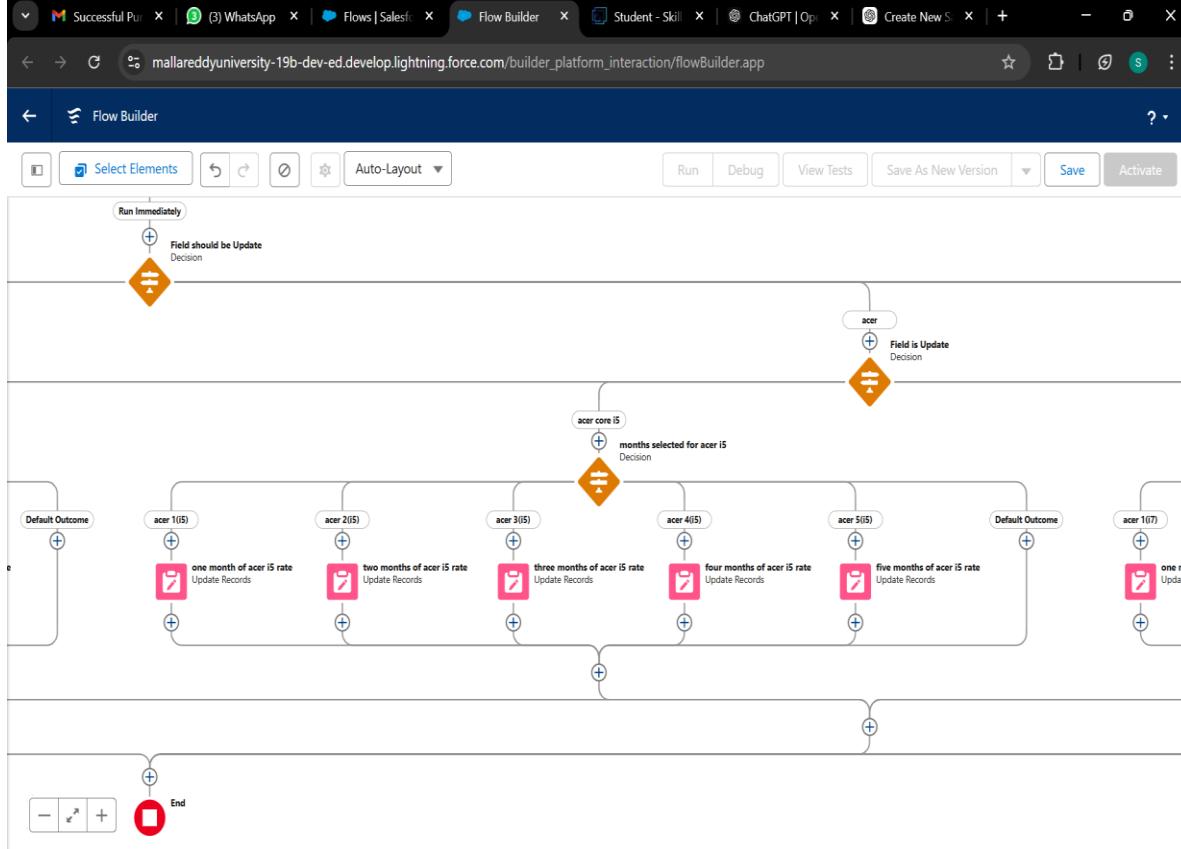
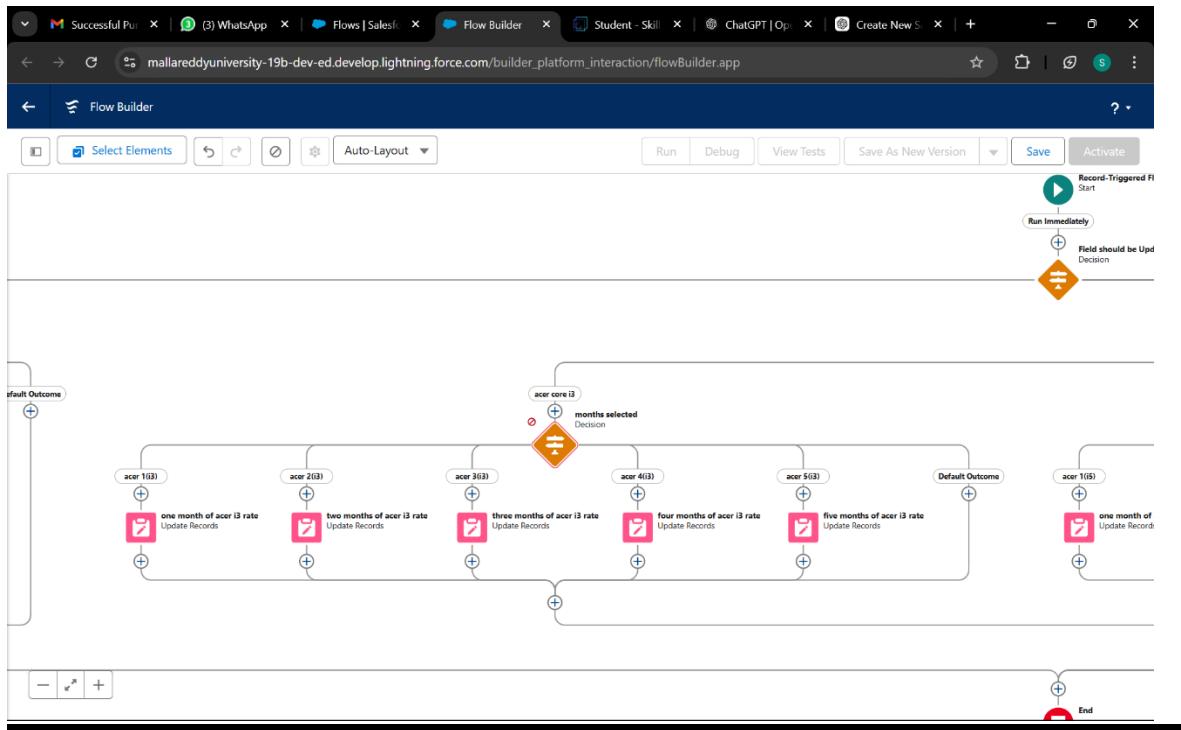
After acer 1(i3) there is '+' symbol like acer 2(i3),acer 3(i3),acer 4(i3),acer 5(i3).

Click on '+' then select update records

Enter the Details Label: one month of acer i3 rate , API name: Gets Automatically Generated.

Field:- Amount__c , value:- for acer 1(i3)-900, acer 2(i3)-1800, acer 3(i3)-2700, acer 4(i3)-3600, acer 5(i3)-4800. Follow for all these finally Click done





Similarly, repeat above process for 2,3,4,5 months rates with their respective amounts

Final flow for acer will be :

c) creating a flow on hp laptop

Go to flow page

Beside hp there is a symbol '+' click on that.

Again select decision

Enter the Details Label: Field is Update, API name: Gets Automatically Generated. select the Outcome Details Label: hp core i5 , Outcome API name: Gets Automatically Generated.

Resource: Select Record.core type.

Operator: Select Equals.

Value: Select hp i5.

Go to flow page

Beside hp there is a symbol '+' click on that.

Again select decision

Enter the Details Label: hp field should be updated , API name: Gets Automatically Generated.

Enter the Outcome Details Label: hp 1(i5) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: 1.

Enter the Outcome Details Label: hp 2(i5) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 2..

Click '+' outcome details

Enter the Outcome Details Label: hp 3(i5) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 3..

Click '+' outcome details

Enter the Outcome Details Label: hp 4(i5) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 4.

Click '+' outcome details

Enter the Outcome Details Label: hp 5(i5) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 5.

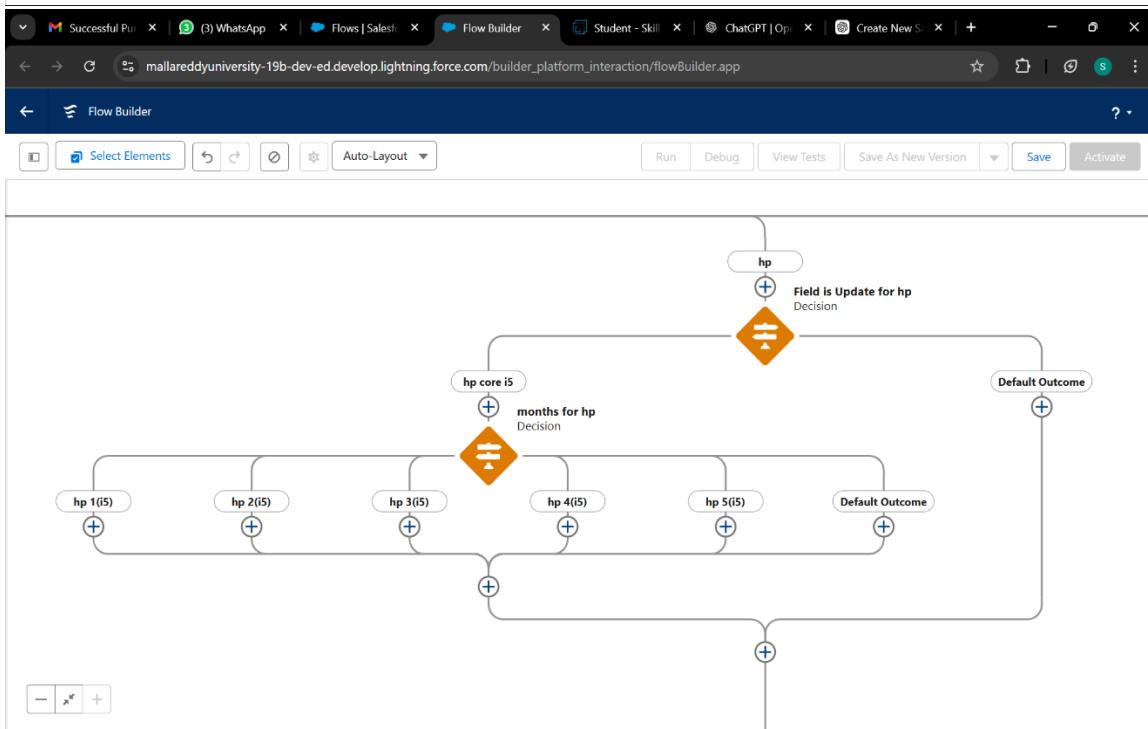
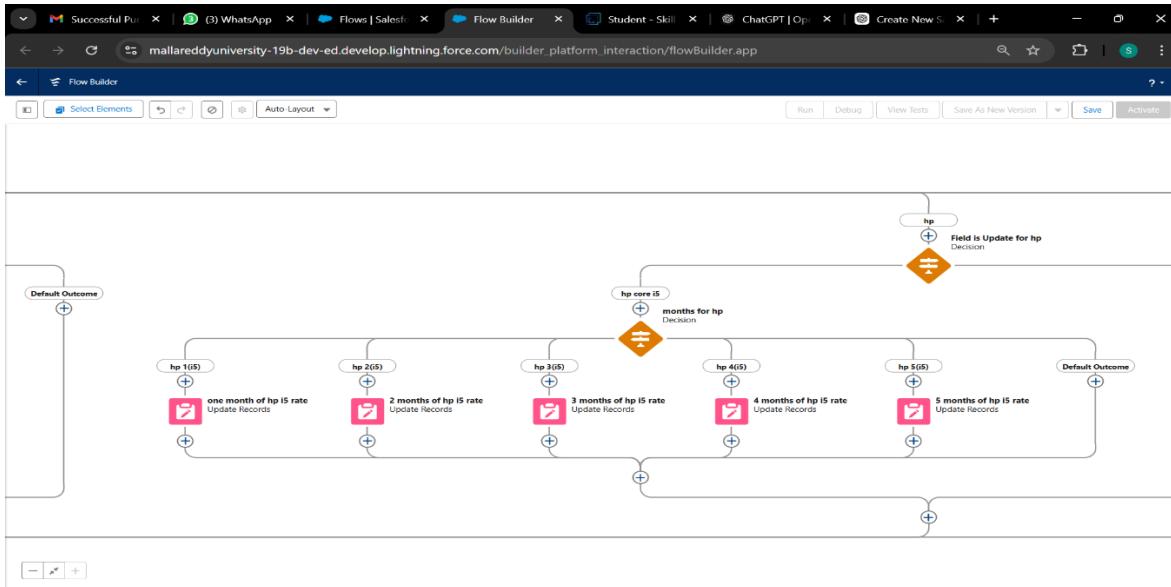
Click on done.

After hp 1(i5) there is '+' symbol like hp 2(i5), hp 3(i5), hp 4(i5),hp 5(i5).

Click on '+' then select update records

Enter the Details Label: one month of hp i5 rate , API name: Gets Automatically Generated.

Field:- Amount__c , value:- for hp 1(i5)-1700, hp 2(i5)-3400, hp 3(i5)-5100, hp 4(i5)-6800, hp5(i5)-8500. Follow for all these finally Click done.



Similarly, repeat above process for 2,3,4,5 months rates with their respective amounts

Final flow for hp will be :

d) creating a flow on mac laptop

Go to flow page

Beside mac there is a symbol '+' click on that.

Again select decision

Enter the Details Label: mac should be Updated, API name: Gets Automatically Generated. select the Outcome Details Label: mac laptop , Outcome API name: Gets Automatically Generated.

Resource: Select Record.core type.

Operator: Select Equals.

Value: Select Bionic Chip.

Click done.

Go to flow page

Beside Mac there is a symbol '+' click on that.

Again select decision

Enter the Details Label: Mac months selected , API name: Gets Automatically Generated.

Enter the Outcome Details Label: mac bionic chip(1) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: 1.

Enter the Outcome Details Label: mac bionic chip(1) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 2..

Click '+' outcome details

Enter the Outcome Details Label: mac bionic chip(1) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 3..

Click '+' outcome details

Enter the Outcome Details Label: mac bionic chip(1) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 4.

Click '+' outcome details

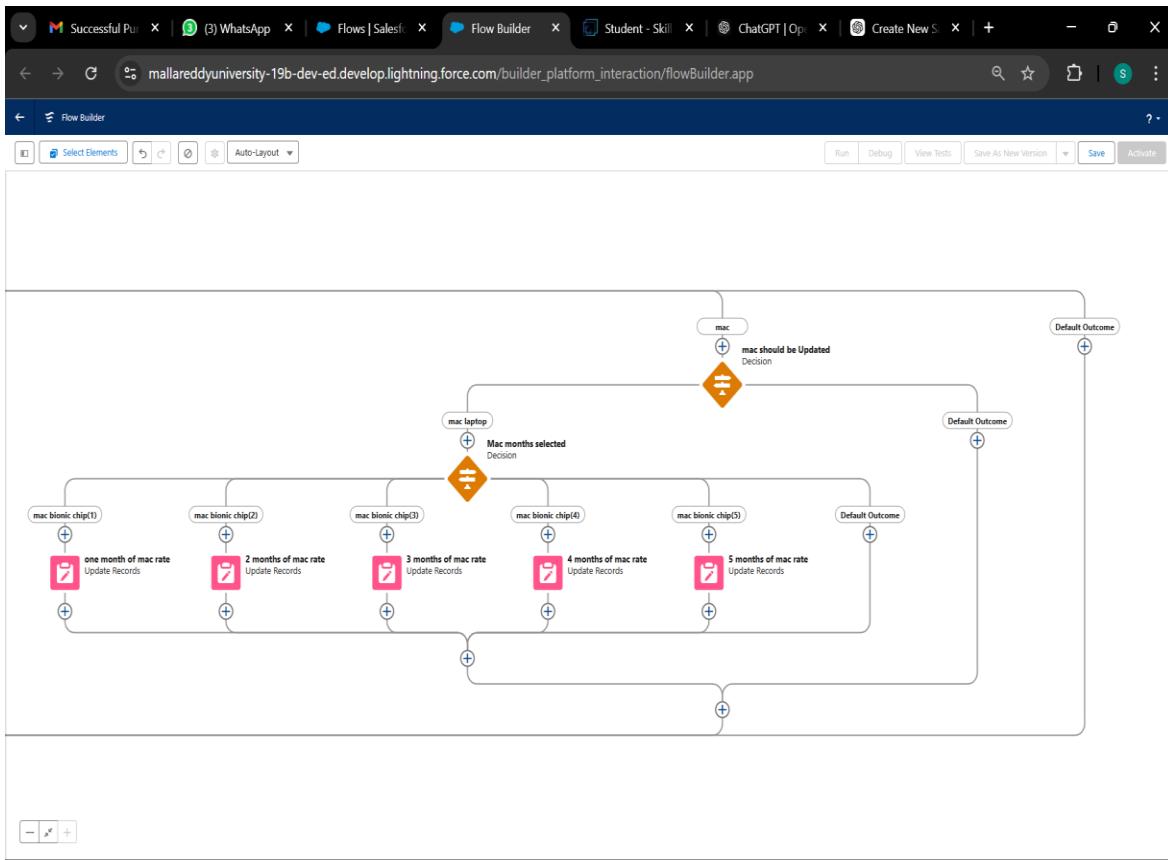
Enter the Outcome Details Label: mac bionic chip(1) , Outcome API name: Gets Automatically Generated.

Resource: Select Record.how many months.

Operator: Select Equals.

Value: Select 5.

Click done.



Similarly, repeat above process for 2,3,4,5 months rates with their respective amounts
Final flow for mac will be :

saving the overall flow :

Task 10: APEX

Steps to create a class in APEX:

Login to the trailhead account and navigate to the gear account in the top right corner. Then we can see the Developer console. Click on the developer console and you will navigate to a new console window. Then you can see many tools in the Toolbar of the new console window. Click on File, New and Apex Class.

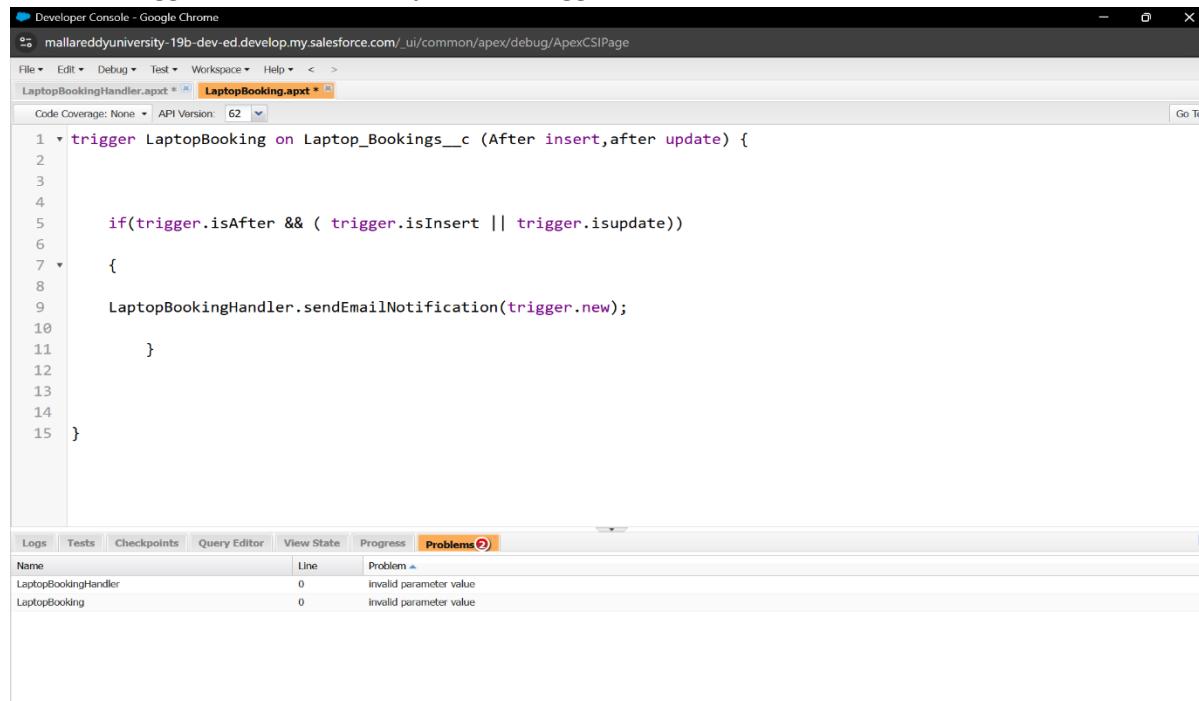
Enter the name of the class to create a new class file.

While still in the trailhead account, navigate to the gear icon in the top right corner.

Click on developer console and you will be navigated to a new console window.

Click on the File menu in the toolbar, and click on new- Trigger.

Enter the trigger name and the object to be triggered.



The screenshot shows the Salesforce Developer Console in Google Chrome. The URL is mallareddyuniiversity-19b-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage. The window title is "Developer Console - Google Chrome". The main area displays the following Apex trigger code:

```
trigger LaptopBooking on Laptop_Bookings__c (After insert,after update) {
    if(trigger.isAfter && ( trigger.isInsert || trigger.isupdate))
    {
        LaptopBookingHandler.sendEmailNotification(trigger.new);
    }
}
```

Below the code editor, there is a "Problems" tab in the toolbar. The "Problems" tab is active, showing two errors:

Name	Line	Problem
LaptopBookingHandler	0	invalid parameter value
LaptopBooking	0	invalid parameter value

Developer Console - Google Chrome

mallareddyuniiversity-19b-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >

LaptopBookingHandler.apxt * LaptopBooking.apxt *

Code Coverage: None ▾ API Version: 62 ▾ Go To

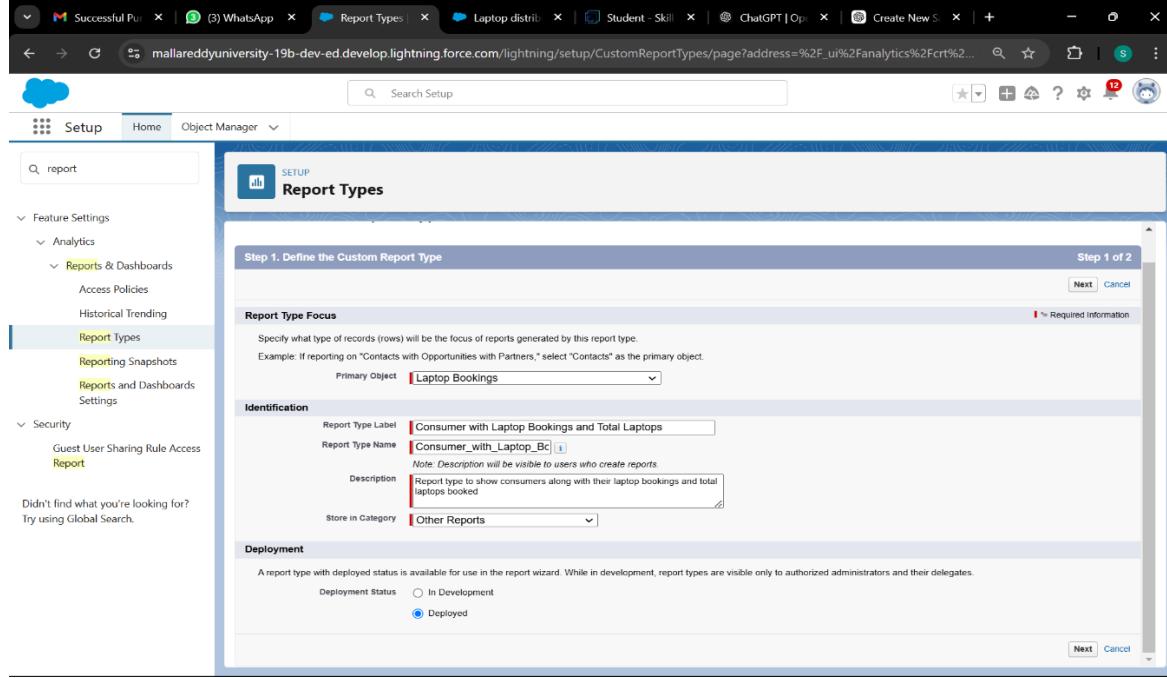
```
1 public class LaptopBookingHandler {  
2     public static void sendEmailNotification (List<Laptop_Bookings__c> lapList){  
3         for(Laptop_Bookings__c lap:lapList)  
4             {  
5                 Messaging.SingleEmailMessage email = new Messaging.SingleEmailMessage();  
6                 email.setToAddresses( new List<String>{lap.Email__c});  
7                 email.setSubject('Welcome to our company');  
8                 string body = 'Dear ' +lap.Name +', \n';  
9                 body += 'Welcome to Laptop Rentals! You have been seen as a valuable customer to us.\n';  
10                body += 'Please continue your journey with us, while we try to provide you with good quality resources. \n';  
11                body += 'Laptop Amount = ' + lap.Amount__c + ' \n';  
12                body += 'core type = '+lap.core__c + ' \n';  
13                body += 'Laptop type = '+lap.Laptop_Brands__c;  
14                email.setPlainTextBody(body);  
15                Messaging.sendEmail(new List<Messaging.SingleEmailMessage>{email});  
16            }  
17        }  
18    }  
19
```

Logs Tests Checkpoints Query Editor View State Progress Problems 0

Name	Line	Problem
LaptopBookingHandler	0	invalid parameter value
LaptopBooking	0	invalid parameter value

Task 11:Reports

a) setting report type: search report type in Quick Find box and do the following process as shown in figure below



b)Create Report

Go to the app -click on the reports tab

Click New Report.

3.Select report type from category or from report type panel or from search panel “consumer with Laptop Bookings and total laptops” >> click on start report.

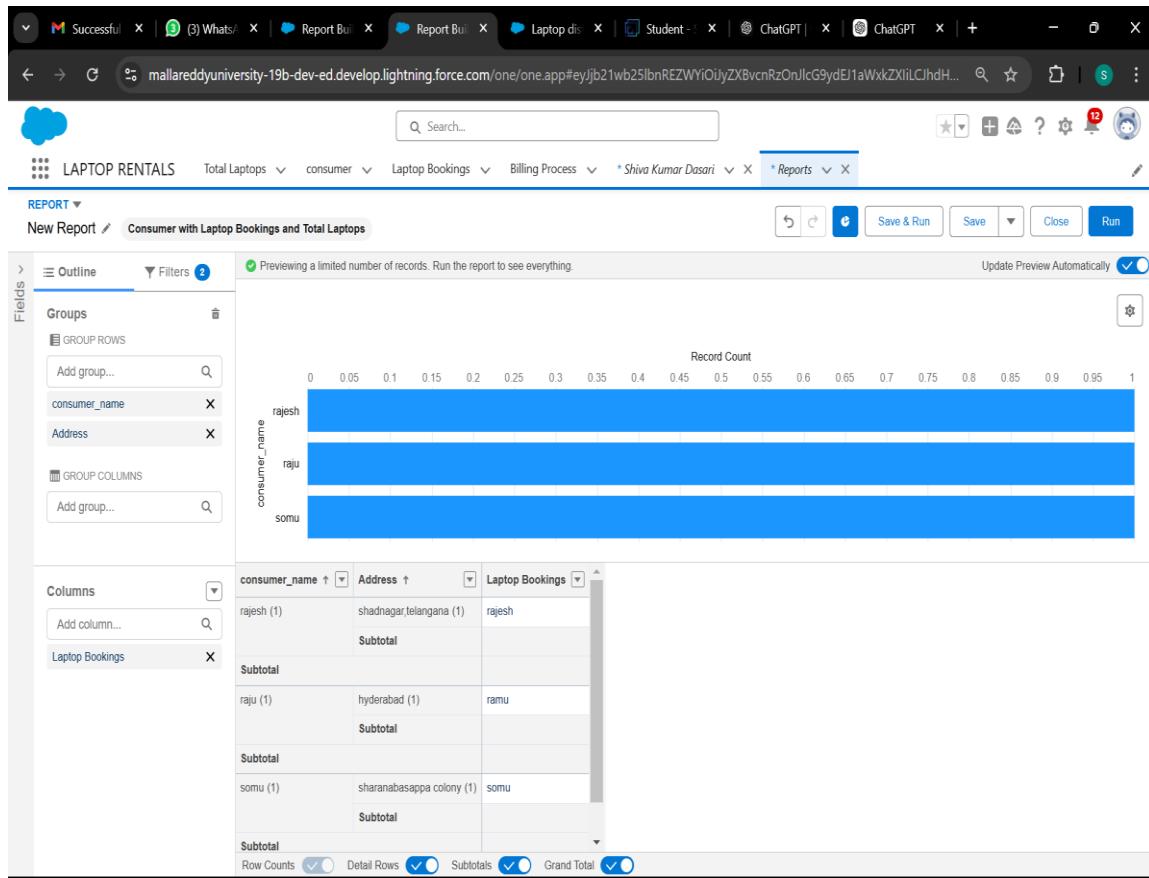
4.Customize your report

5.Add fields from left pane as shown below

Follow the above image group rows and columns.

6.Click the column drop down and select bucket list.

Click apply it.



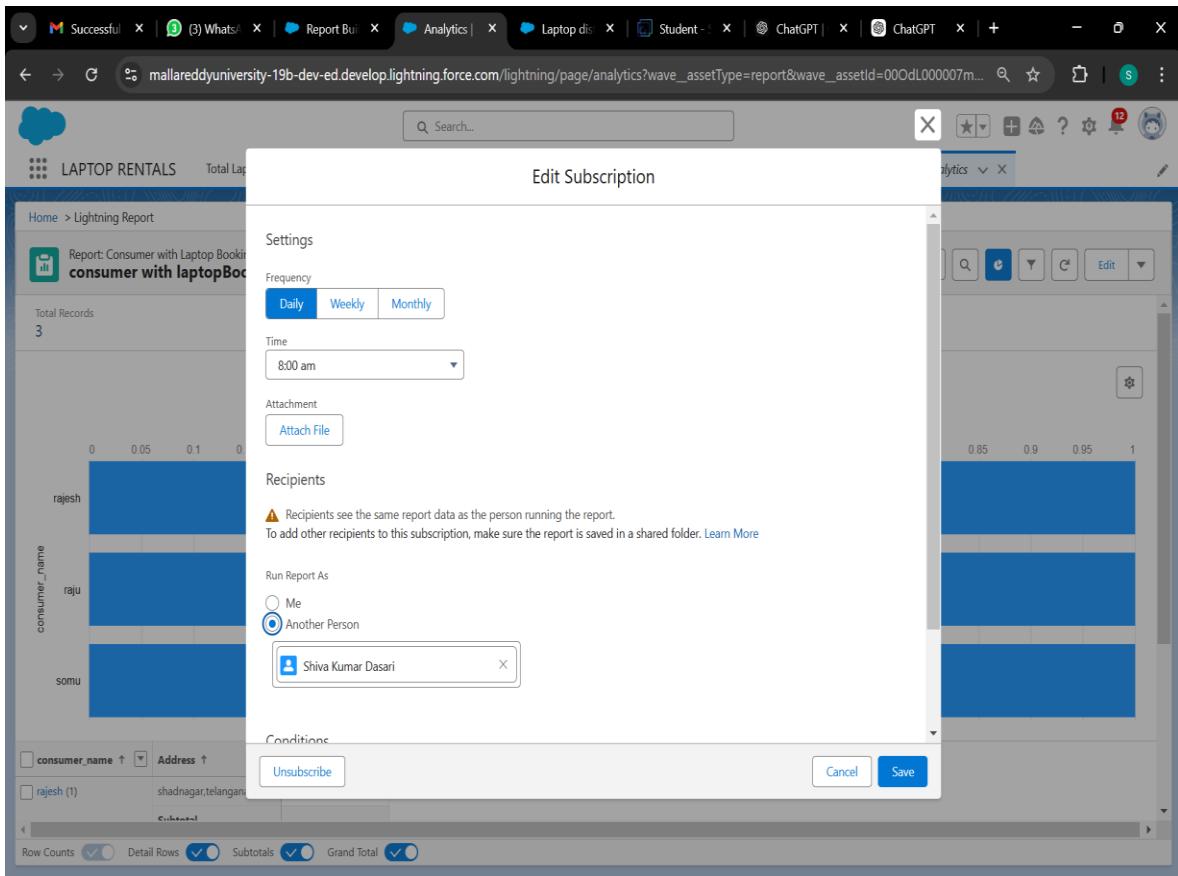
c)Sharing report to owner

Click edit drop down and select subscribe option

Follow as per below image.

After selecting the run report as a “another person” select your personal account or whom you want to send that mail to.

Click save.



Task 12: Dashboards

Create Dashboard Folder

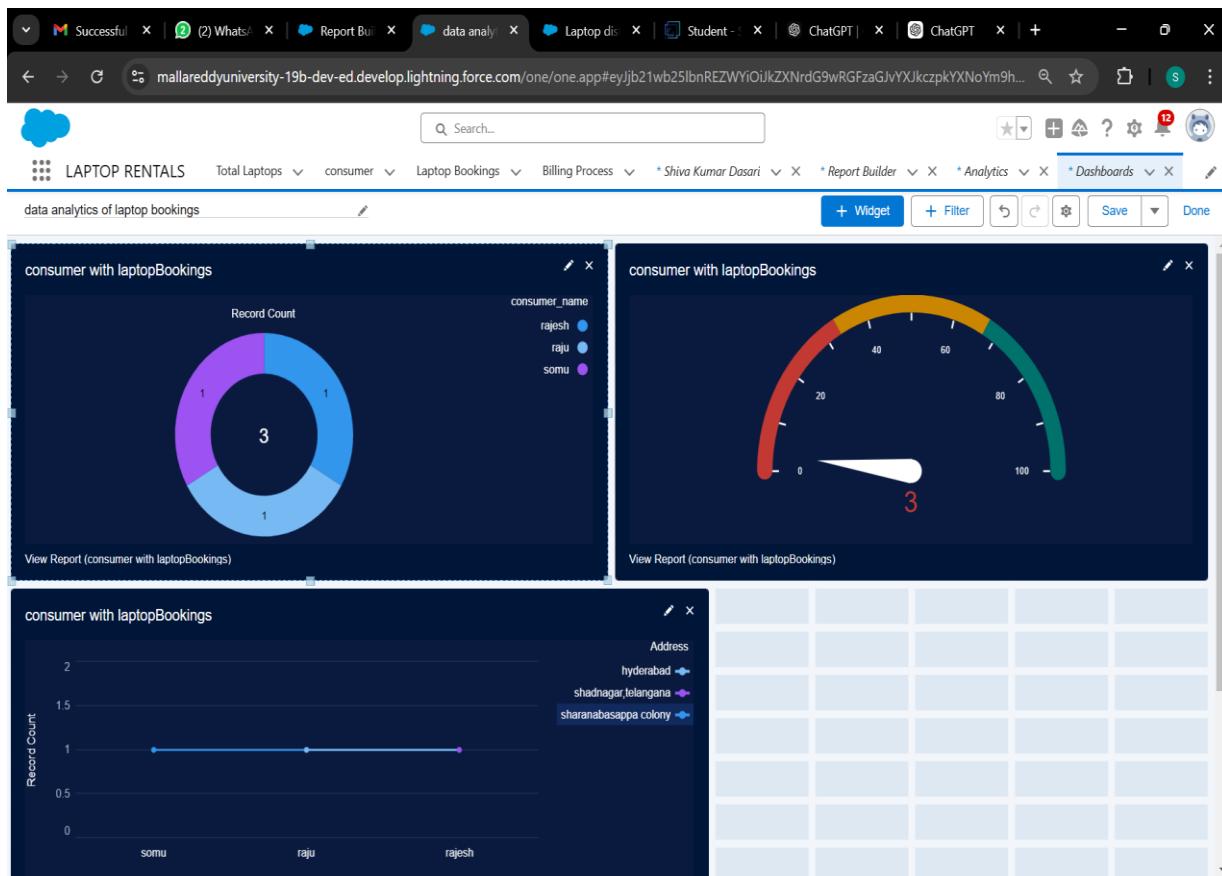
Click on the app launcher and search for the dashboard.

Click on the dashboard tab.

Click the new folder, give the folder label as "total rent amount".

Folder unique names will be auto populated.

Click save.



60

THANK YOU