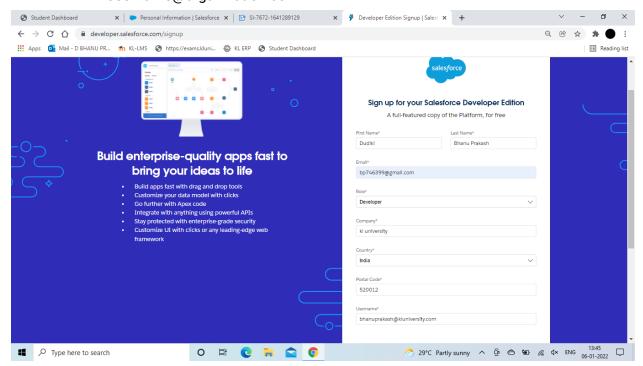
## College Management Application

### Day-1:-

## Creating a developer org in salesforce

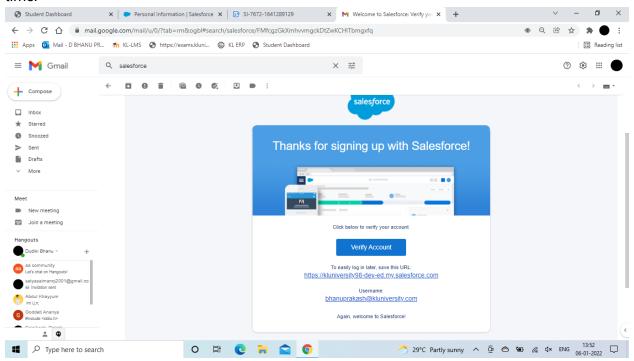
- 1. Go to developers.salesforce.com/
- 2. Click on sign up.
- 3. On the sign up form, enter the following details:
  - 1. First name & Last name
  - 2. Email
  - 3. Role: Developer
  - 4. Company: College Name
  - 5. County: India
  - 6. Postal Code: pin code
  - 7. Username: should be a combination of your name and company
    This need not be an actual email id, you can give anything in the format:
    username@organization.com



#### **Account Activation**

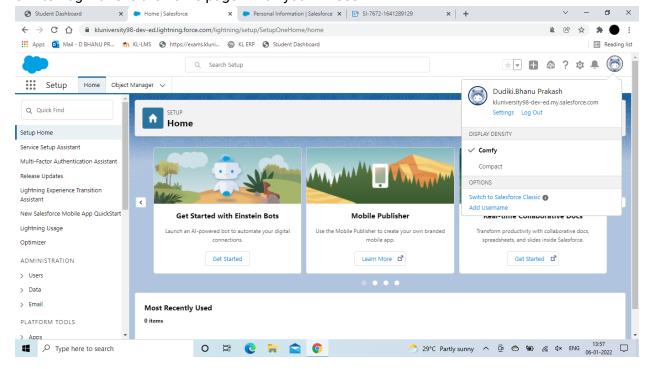
Go to the inbox of the email that you used while signing up. Click on the verify account to

activate your account. The email may take 5-10mins, as allocating a developer org will take time.



### **Login To Your Salesforce Account**

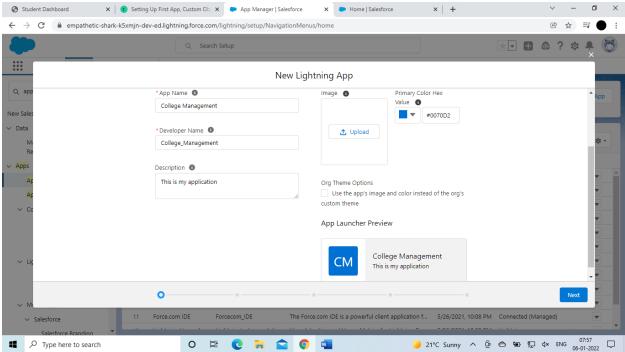
- 1.Go to salesforce.com and click on login.
- 2.Enter the username and password that you just created.
- 3. After login this is the home page which you will see.



### Day-2:

# Create The Custom Objects For The Application

# **Creating New Lightning App**

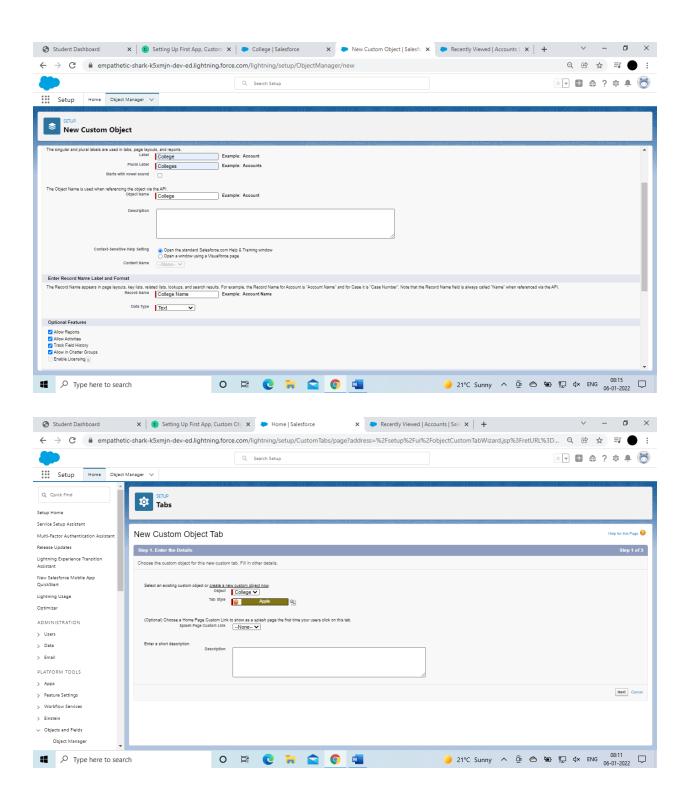


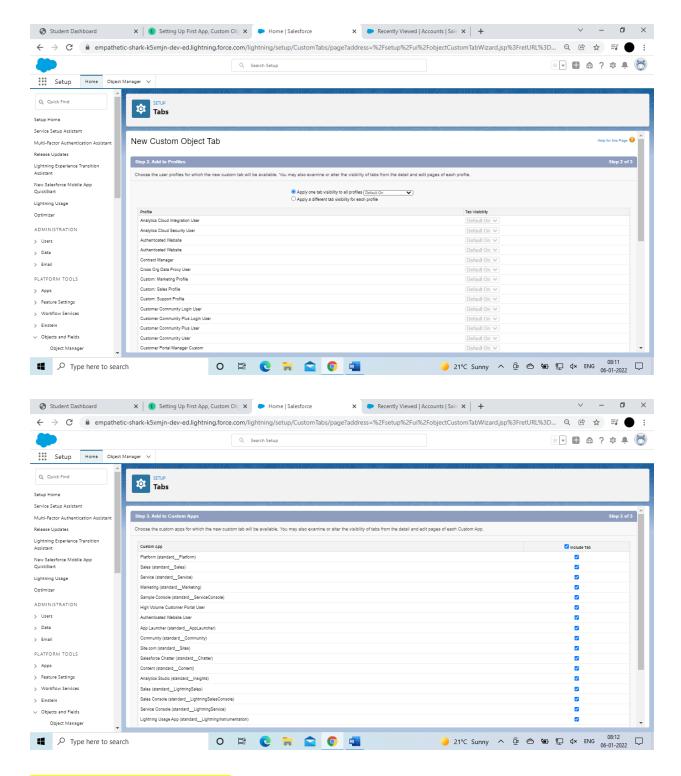
# **Custom Objects Creation**

## 1)College:-

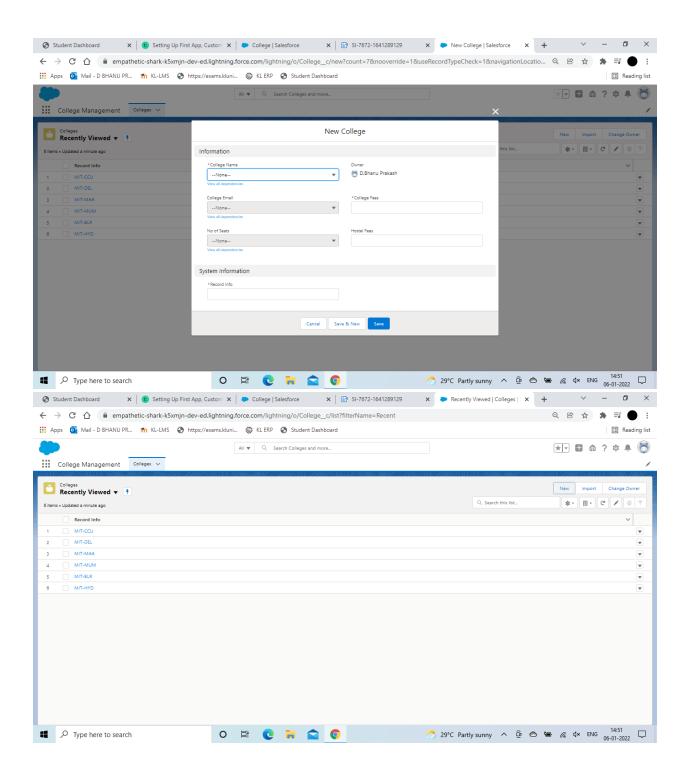
Create the following fields on the college object.

Field Name	Data Type	Required	Values
Record Info	Text		
College Fees	Currency(7,2)	Yes	
Hostel Fees	Currency(6,2)	Yes	
College Name	Picklist(Refer Business Logic In Milestones)	Yes	
Email	Picklist		blr@mit.co.in hyd@mit.co.in mum@mit.co.in maa@mit.co.in ccu@mit.co.in del@mit.co.in
Capacity Of Students	Picklist		500-1000, 1000-2500, 2500-6000, 6000-10000





#### **COLLEGE OBJECT MANAGER:-**

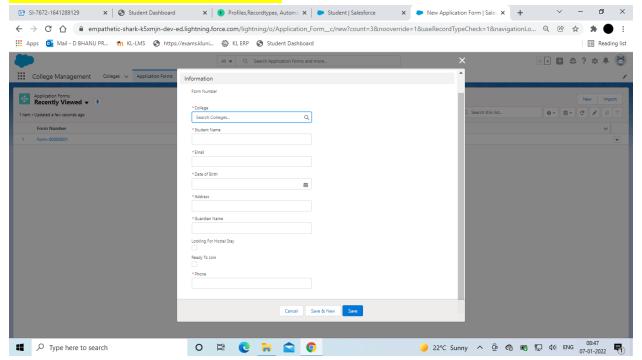


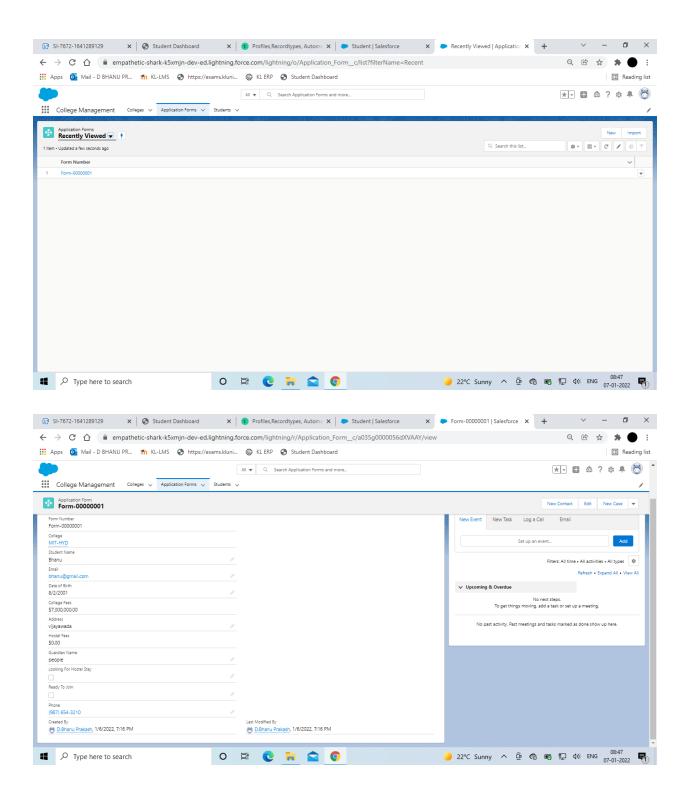
# 2)Application Form:-

Create the following fields on the application form object:-

Field Name	Data Type	Requir	Values
		ed	
Application Form ID	Autonumber		F-{000000}
			Starting
			Number=1
Address	Text(255)	Yes	
College	Master-Detail(College)	Yes	
College Fees	Formula(Currency)		
Hostel Fees	Formula(Currency)		
date of Birth	Date	Yes	
Email	Email(Unique)	Yes	
Guardian Name	Text(30)	Yes	
Looking For Hostel	Checkbox(default=Unch		
Stay	eck)		
Ready To Join	Checkbox(default=Unch		
	eck)		
Student Name	Text(30)	Yes	
Phone	Phone	Yes	

### **APPLICATION FORM OBJECT MANAGER:-**



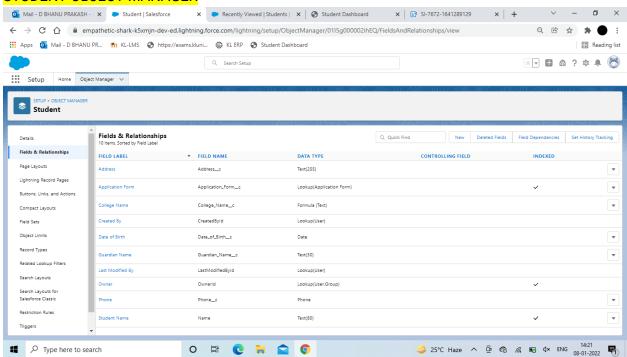


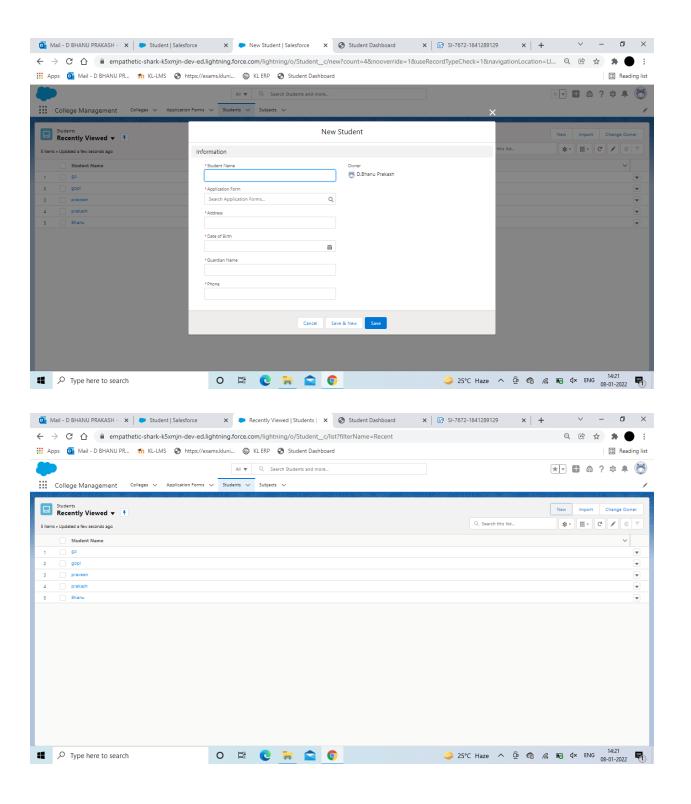
# 3)Student

Create the following fields on the student object.

Field Name	Data Type	Requir	Values
		ed	
Student Name	Text		
Address	Text(255)	Yes	
Application	Lookup(Application		
Form	Form)		
College Name	Formula(Text)		
Date Of Birth	Date	Yes	
Guardian	Text(30)	Yes	
Name			
Phone	Phone	Yes	

#### STUDENT OBJECT MANAGER





# 4)Subject Object

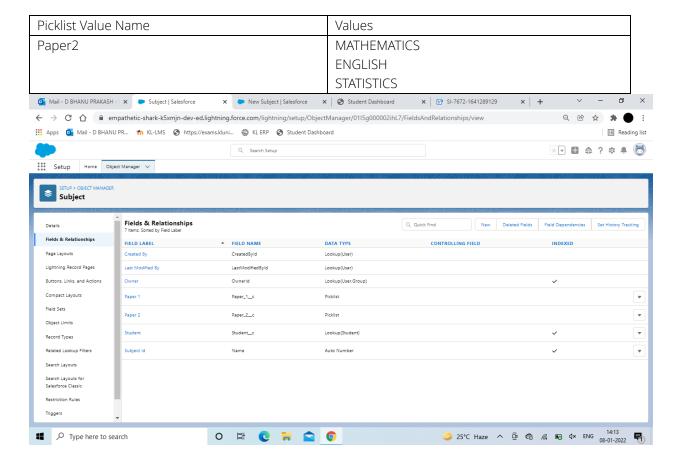
Create the following fields On the Subject object.

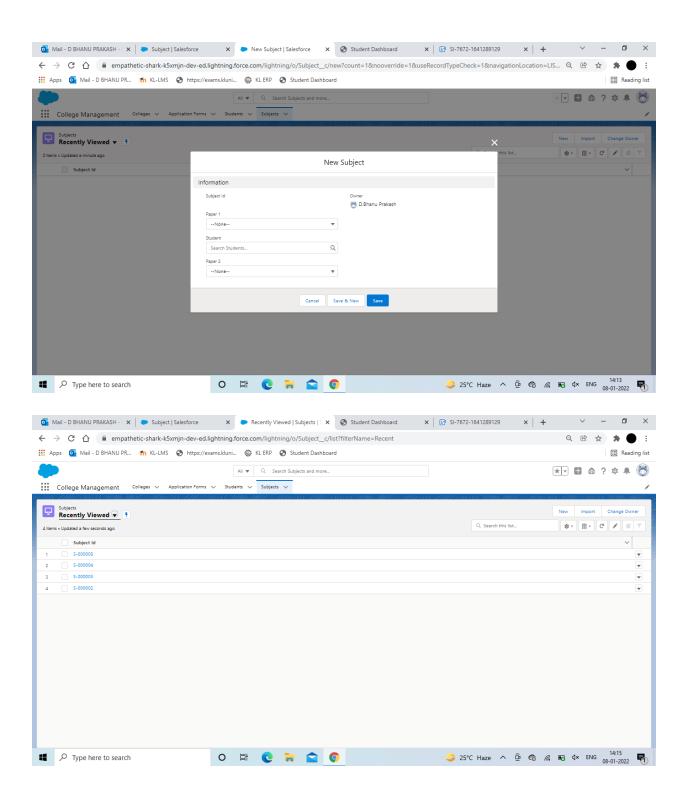
Field	Data Type	Requir	Values
Name		ed	
Subject ID	AutoNumber		S-{000000}
			Starting
			Number=1
Paper 1	Picklist(Refer Business Logic Milestone)		
Paper2	Picklist(Refer Business logic Milestone)		
Student	Lookup(Student)		

Paper1

Picklist Value Name	Values
Paper 1	APEX
	JAVA
	С
	C++

Paper2





## **Creating Global Picklist Value Sets:-**

1. Create the following global picklist value sets for the application.

### a)College

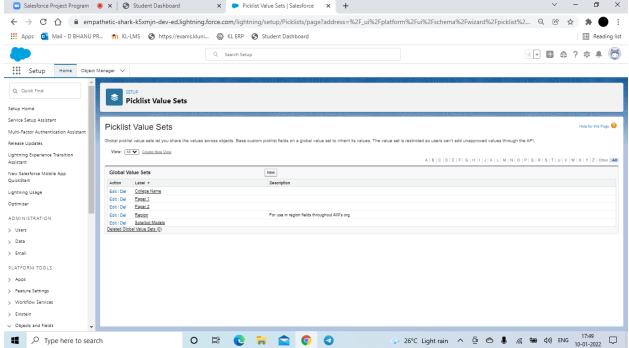
Picklist Value	Values
Name	
Colllege	MIT-HYD
	MIT-BLR
	MIT-MUM
	MIT-MAA
	MIT-DEL
	MIT-CCU

# b)Paper1

Picklist Value Name	Values
Paper 1	APEX
	JAVA
	С
	C++

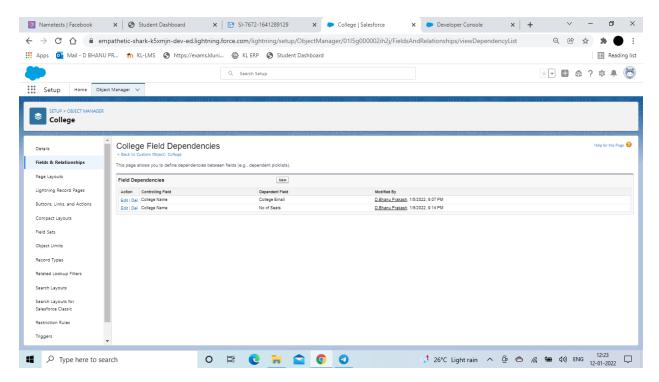
### c)Paper2

Picklist Value Name	Values
Paper2	MATHEMATICS
	ENGLISH
	STATISTICS
Cold Division Cold Cold Cold Cold Cold Cold Cold Cold	



## **Creating Field Dependencies:-**

- 1. Create field dependency between college Name and Email, where the controlling field is college Name and dependent field is Email. Select the email ids according to the college names.
- 2. Create field dependency between college Name and capacity of students, where the controlling field is college Name and dependent field is Capacity of Students. Select the values according to your wish.

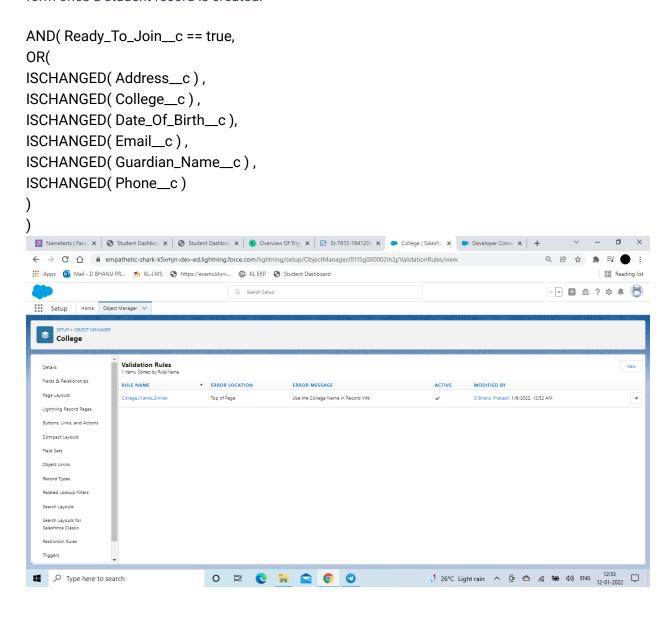


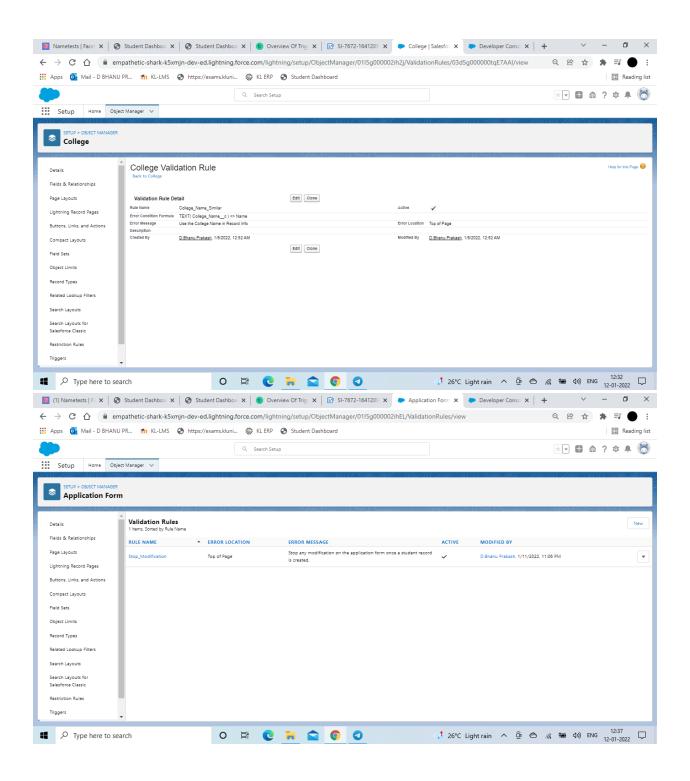
### **Creating Validation Rules:-**

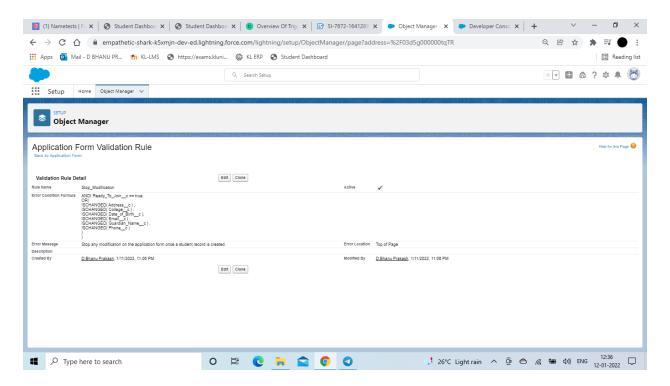
1. Create a validation rule on the college object such that the college name and record info should have the same name.

TEXT(College\_Name\_\_c) <> Name.

2. Create a validation rule on the application form object to stop any modification on the application form once a student record is created.

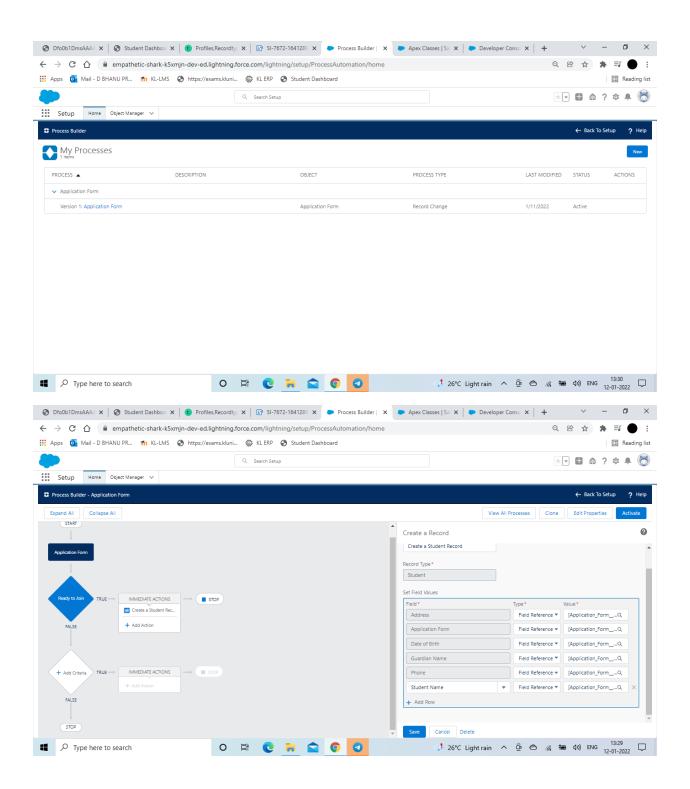






#### **Process Automation:-**

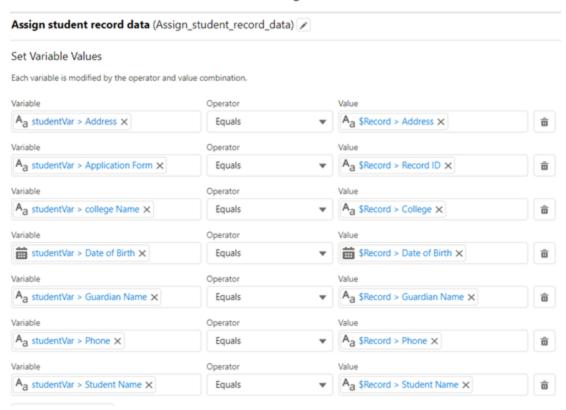
- 1. Create an automation process such that when the "ready to join" field is checked on the application form object we need to create the student record automatically with the information specified in the application form record.
- 2. Go to Setup -> select "Process Builder" from quick find. Create a Process Builder on the "Application Form" object with a condition as "When a record change". And select "When a record is created or edited".
  - a. In the diamond shape box(called nodes), select the criteria which trigger the Process builder to fire. In our example, it is "When Ready to Join field is checked."
  - b Once the node is setup, click on the adjacent box called "Immediate action". And select create a record on the student object. Please follow the below screenshot.



### **Create The Student Record Using Flow:-**

- 1. First deactivate the process builder which we created earlier.
- 2. Now search for flows and select new flow ->record triggered flow
- 3. For object select application form, in configure trigger select when the record is updated for entry criteria select as ready to join equals to true.
- 4. Now create a variable named student in the resource section.
- 5. Now add the assignment as follows.

#### Edit Assignment



6. Now add create records.

#### Day-4:

### **Batch Apex:-**

Batch Apex is used to run large jobs (think thousands or millions of records!) that would exceed normal processing limits. Using Batch Apex, you can process records asynchronously in batches (hence the name, "Batch Apex") to stay within platform limits. If you have a lot of records to process, for example, data cleansing or archiving, Batch Apex is probably your best solution.

Syntax Of BatchApex

```
public class MyBatchClass implements Database.Batchable<sObject> {
    public (Database.QueryLocator | Iterable<sObject>) start(Database.BatchableContext bc) {
        // collect the batches of records or objects to be passed to execute
    }
    public void execute(Database.BatchableContext bc, List<P> records){
        // process each batch of records
    }
    public void finish(Database.BatchableContext bc){
        // execute any post-processing operations
    }
}
```

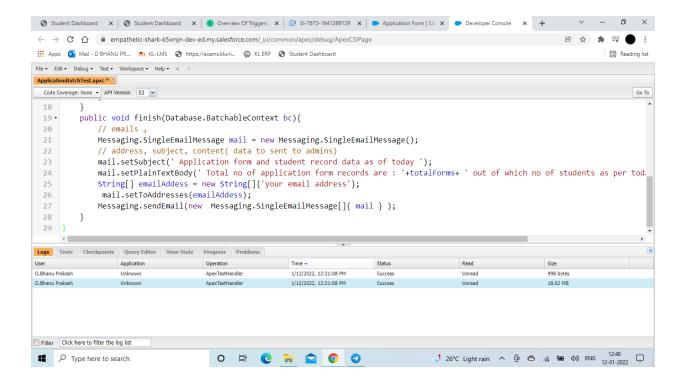
#### **Create A Batchapex For Application Form:-**

1. From the developer console create a new apex class and enter the following code.

Public class ApplicationBatchTest implements Database.Batchable<sObject>{

```
//start(), execute(). finish()
public Integer totalForms = 0; // total no of application form
public Integer totalConvertedForms = 0; // total no of students
public Database.QueryLocator start(Database.BatchableContext bc){
    // gathers the data for you
    String applicationQuery = 'select id, Name, Ready_To_Join_c from ApplicationForm_c';
    return Database.getQueryLocator(applicationQuery);
}
public void execute(Database.BatchableContext bc, List<ApplicationForm_c> formList){
    // process the data
    for(ApplicationForm_c af : formList){
        totalForms++;
        if(af.Ready_To_Join_c){
            totalConvertedForms++;
        }
}
```

```
}
     public void finish(Database.BatchableContext bc){
            // emails,
            Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
            // address, subject, content( data to sent to admins)
            mail.setSubject(' Application form and student record data as of today ');
                   mail.setPlainTextBody(' Total no of application form records are : '+totalForms+ ' out of
which no of students as per today: '+totalConvertedForms);
            String[] emailAddess = new String[]{'your email address'};
             mail.setToAddresses(emailAddess);
            Messaging.sendEmail(new Messaging.SingleEmailMessage[]{ mail } );
     }
    Student Dashboard x | 🕙 Student Dashboard x | 🔞 Student Dashboard x | 📵 Overview Of Triggers, x | 💽 SI-7672-1641289129 x | Papilication Form | Sal X Papilication Form 
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  File - Edit - Debug - Test - Workspace - Help - <
  ApplicationBatchTest.apxc * 🗵
    Code Coverage: None ▼ API Version: 53 ▼
                                                                                                                                                                                                                                                              Go To
     1 • Public class ApplicationBatchTest implements Database.Batchable<sObject>{
                    //start(), execute(). finish()
                    public Integer totalForms = 0; // total no of application form
                    public Integer totalConvertedForms = 0; // total no of students
                    public Database.QueryLocator start(Database.BatchableContext bc){
                            // gathers the data for you
     6
                            String applicationQuery = 'select id, Name, Ready_To_Join__c from Application_Form__c';
                           return Database.getQueryLocator(applicationQuery);
     8
     9
     10 ▼
                    public void execute(Database.BatchableContext bc, List<Application_Form__c> formList){
                            // process the data
                            for(Application_Form__c af : formList){
     12 🕶
     13
                                   totalForms++;
                                   if(af.Ready_To_Join__c){
    14
                                           totalConvertedForms++;
    16
    18
    19 ▼ 4
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  Type here to search
```



#### Create A Schedular Class:-

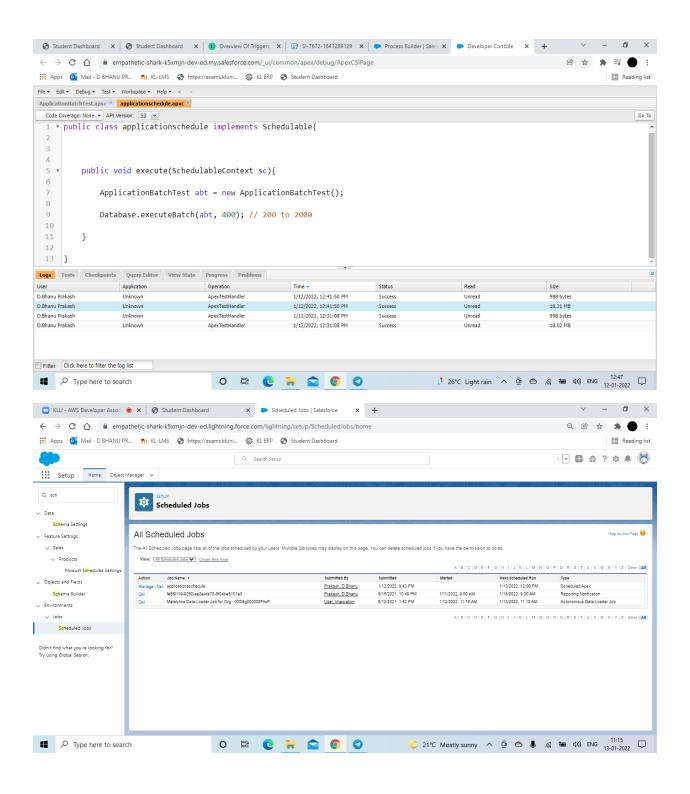
}

1. From the developer console create a new apex class and enter the following code.

public class applicationschedule implements Schedulable{

```
public void execute(SchedulableContext sc){
   ApplicationBatchTest abt = new ApplicationBatchTest();
   Database.executeBatch(abt, 400); // 200 to 2000
}
```

From setup search for apex class and click on schedule jobs and fill the details as per your requirements.



## DAY-5:-

## Create College DataTable Component( APEX CLASS):-

Create an Apex Class With The Required Functionality

```
public class GetapplicationDetails
   @AuraEnabled(cacheable=true)
public static List<Application_Form__c> getapplicationvalues(id Collegeld)
   {
List<Application_Form_c> formlist = [SELECT ID, College_Fees_c,Name,
Date_Of_Birth__c,Email__c,Hostel_Fees__c, Student_Name__c FROM
Application_Form__c WHERE College__c =: CollegeId];
return formList;
  }
Developer Console - Google Chrome
 mpathetic-shark-k5xmjn-dev-ed.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
 File ▼ Edit ▼ Debug ▼ Test ▼ Workspace ▼ Help ▼ <
 ApplicationBatchTest.apxc 🗷 applicationschedule.apxc 🗷 GetapplicationDetails.apxc 🗵
  Code Coverage: None ▼ API Version: 53 ▼
  1 public class GetapplicationDetails
           @AuraEnabled(cacheable=true)
  4 public static List<Application_Form__c> getapplicationvalues(id CollegeId)
          {
  7 * List<Application_Form_c> formlist = [SELECT ID, College_Fees_c,Name,
  B Date_Of_Birth__c,Email__c,Hostel_Fees__c, Student_Name__c FROM
  9 Application_Form__c WHERE College__c =:CollegeId];
  11 return formList;
  12
          }
  13
  14 }

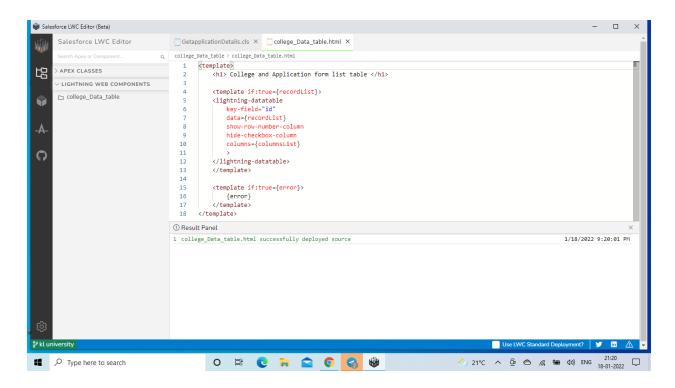
        Logs
        Tests
        Checkpoints
        Query Editor
        View State
        Progress
        Problems

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                                        ApexTestHandle
                                                            1/17/2022, 4:25:26 PM
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                    Unknown
                                       ApexTestHandler
                                                           1/17/2022, 4:25:26 PM
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```

# Create College DataTable Component (HTML FILE):-

```
HTML:
<template>
<h1> College and Application form list table </h1>
<template if:true={recordList}>
  lightning-datatable
    key-field="id"
    data={recordList}
    show-row-number-column
    hide-checkbox-column
    columns={columnsList}
    >
    </lightning-datatable>
  </template>
<template if:true={error}>
    {error}
  </template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></template></t
```

</template>



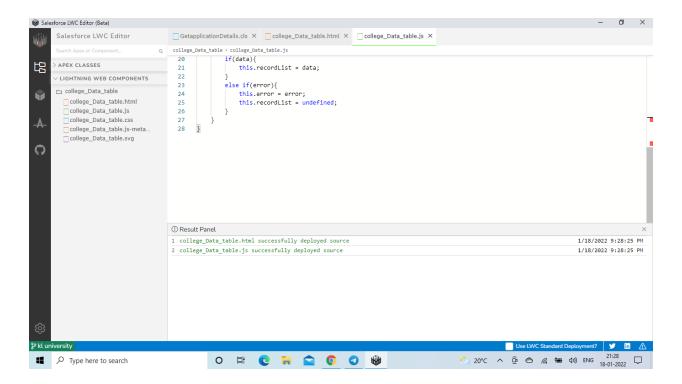
### Create College DataTable Component(JAVA SCRIPT FILE):-

After the creation of the Html file create the following js file

```
@wire(getapplicationvalues, {CollegeId: '$recordId'})
  wiredCollegeData({data, error}){
      if(data){
         this.recordList = data;
     }
      else if(error){
         this.error = error;
         this.recordList = undefined;
  }
👹 Salesforce LWC Editor (Beta)
                                                                                                                                - 🛭 ×
     Salesforce LWC Editor
                               GetapplicationDetails.cls × college_Data_table.html × college_Data_table.js ×
                            Q college_Data_table > college_Data_table.js
                                 1 import { LightningElement, api, wire } from 'lwc';
                           铝
     V LIGHTNING WEB COMPONENTS
     college_Data_table
       college_Data_table.html
       college_Data_table.js
       college Data table.css
       college_Data_table.js-meta...
       college_Data_table.svg
                                        1;
                                        @api recordId;
recordList;
                                 16
                                        error;
                                        @wire(getapplicationvalues, {CollegeId : '$recordId'})
                                        wiredCollegeData({data, error}){
                               (I) Result Panel
                                1 college_Data_table.html successfully deployed source
                                                                                                                            1/18/2022 9:28:25 PM
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```

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## Create College DataTable Component(META FILE):-

Change the Meta File as follows:

