

# M.A.M COLLEGE OF ENGINEERING

PROJECT NAME: Educational Organisation Using ServiceNow

TEAM LEADER:

GIRIVASAKAN.R

TEAM MEMBERS:

1.ATHITHI.P

2.DINESH KUMAR.K

## Educational Organisation Using ServiceNow

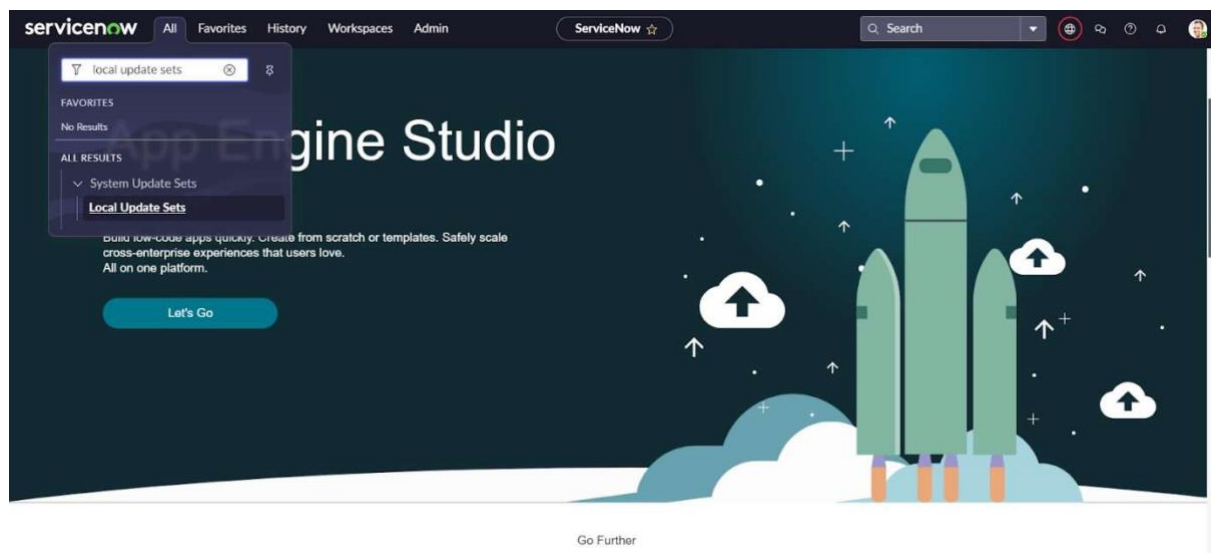
The Educational Management System is a comprehensive platform designed to streamline administrative tasks within educational institutions. It facilitates efficient management of student and teacher data, simplifies the admission process, and provides tools for monitoring student progress.

### Setting up ServiceNow Instance

1. Sign up for a developer account on the ServiceNow Developer site “<https://developer.servicenow.com>”.
2. Once logged in, navigate to the "Personal Developer Instance" section.
3. Click on "Request Instance" to create a new ServiceNow instance.
4. Fill out the required information and submit the request.
5. You'll receive an email with the instance details once it's ready.
6. Log in to your ServiceNow instance using the provided credentials.
7. Now you will navigate to the ServiceNow.

### Creating a Update Set

1. Click on All >> Local update sets .



2. Click on new

Name	Application	State	Installed from	Created	Created by	Parent	Batch Base
Default	App Engine Studio	In progress		2024-04-03 04:32:28	admin	(empty)	(empty)
Default	Global	In progress		2023-10-06 15:26:30	system	(empty)	(empty)

3. Enter the Details Name: Educational Organisation >> Click on Submit and make Current.

Update Set - Create New Update Set

\* Name:

State:

Application:

Parent:

Release date:

Description:

Creating Salesforce Table.

All >> Tables.

Click on new

Enter the Label(Anything you want): Salesforce >> Click on Name it will Automatically generate Api name.

Create columns as given below, Double Click on Column label and Enter the Column labels and click on the tick mark >> Give Type as given .

X

For “Admin Number” Give Display as True and right click on the toggle bar on top >> save.

Click on controls >> Enable Extensible.

Click on “Admin Number” column, In Related Links Click on Advanced View >> Default View (Enable Use dynamic default) >> select Get Next Padded Number in Dynamic default value >> Update .

Click on “Grade” Column >> Click on Choices and give Label, Value and Sequence as given below.

## Creating Admission Table

- Create an Admission Table with Columns given.
- Select Extends Table >> Salesforce and also Select Add module to menu >> Salesforce. □

Create Fields as shown

The screenshot shows the ServiceNow 'Table - New Record' form. The 'Extends table' field is set to 'Salesforce'. The 'Add module to menu' dropdown is also set to 'Salesforce'. Below the form fields, there is a 'Columns' section with a table for defining columns.

Column label	Type	Reference	Max length	Default value	Display

Table Admission						
Columns	Controls	Application Access				
Table Columns for text Search						
Dictionary Entries	Column label	Type	Reference	Max length	Default value	Display
	Sys ID	Sys ID (GUID)	(empty)	32		false
X	Admin Status	Choice	(empty)	40		false
X	Admission Number	Reference	Salesforce	32		false
X	Area	String	(empty)	40		false
X	City	String	(empty)	40		false
X	Comments	String (Full UTF-8)	(empty)	255		false
X	District	String	(empty)	40		false
X	Fee	Price	(empty)	20		false
X	House No	String	(empty)	40		false
X	Mandal	String	(empty)	40		false
X	Pincode	Choice	(empty)	40		false
X	Purpose of join	Choice	(empty)	40		false
X	School	Choice	(empty)	40		false
X	School Area	Choice	(empty)	40		false
	Class	System Class Name	(empty)	80	javascript:current.getTable();	false

- Create choice for Admin Status as:

Dictionary Entry Admin Status						
Create Choice List Delete Column Update						
Related Links						
Show Table						
Run Point Scan						
Advanced view						
Access Controls Choices (7) Attributes Labels (1) Dictionary Overrides						
Label Search						
Label	Value	Language	Sequence	Inactive	Updated	
New	New	en	1	false	2024-04-02 21:10:25	
Join in progress	In progress	en	2	false	2024-04-02 21:11:03	
Joined	Joined	en	3	false	2024-04-02 21:11:26	
Rejected	Rejected	en	4	false	2024-04-02 21:12:00	
Closed	Closed	en	5	false	2024-04-02 21:13:05	
Rejoined	Rejoined	en	6	false	2024-04-02 21:13:08	
Cancelled	Cancelled	en	7	false	2024-04-02 21:13:27	
Insert a new row...						

- Create choice for Pincode as:

Access Controls Choices (3) Attributes Labels (1) Dictionary Overrides						
Label Search						
Label	Value	Language	Sequence	Inactive	Updated	
509358	509358	en	1	false	2024-04-02 21:15:19	
500079	500079	en	2	false	2024-04-02 21:15:46	
500081	500081	en	3	false	2024-04-02 21:16:05	
Insert a new row...						

- Create choice for Purpose of Join as:

Access Controls Choices (3) Attributes Labels (1) Dictionary Overrides						
Label Search						
Label	Value	Language	Sequence	Inactive	Updated	
Tuition	Tuition	en	1	false	2024-04-02 21:17:09	
Coaching	Coaching	en	2	false	2024-04-02 21:17:31	
Teacher	Teacher	en	3	false	2024-04-02 21:17:53	
Insert a new row...						

- Create choice for School as:

Access Controls

Choices (2)

Attributes

Labels (1)

Dictionary Overrides

Label

Search

Actions on selected rows...

New

Choices

Label

Value

Language

Sequence

Inactive

Updated

Stanley

Stanley

en

1

false

2024-04-02 21:19:14

Nareesh IT

Nareesh IT

en

2

false

2024-04-02 21:19:35

+

Insert a new row...

- Create choice for School Area as:

Access Controls

Choices (2)

Attributes

Labels (1)

Dictionary Overrides

Label

Search

Actions on selected rows...

New

Choices

Label

Value

Language

Sequence

Inactive

Updated

Near Market

Near Market

en

1

false

2024-04-02 21:20:53

Near Bus Stand

Near Bus Stand

en

2

false

2024-04-02 21:21:24

Insert a new row...

## Creating Student Progress Table

- Create a Student Progress Table with Columns given.
- Select Add module to menu >> Salesforce.
- Create Fields as shown:

X	Admission Number	Reference	Salesforce	32	false
X	English	String	(empty)	40	false
X	Hindi	String	(empty)	40	false
X	Maths	String	(empty)	40	false
X	Percentage	String	(empty)	40	false
X	Result	String	(empty)	40	false
X	Science	String	(empty)	40	false
X	Social	String	(empty)	40	false
X	Telugu	String	(empty)	40	false
X	Total	String	(empty)	40	false
	Insert a new row...				

## Configuring Table form for Student Progress Table

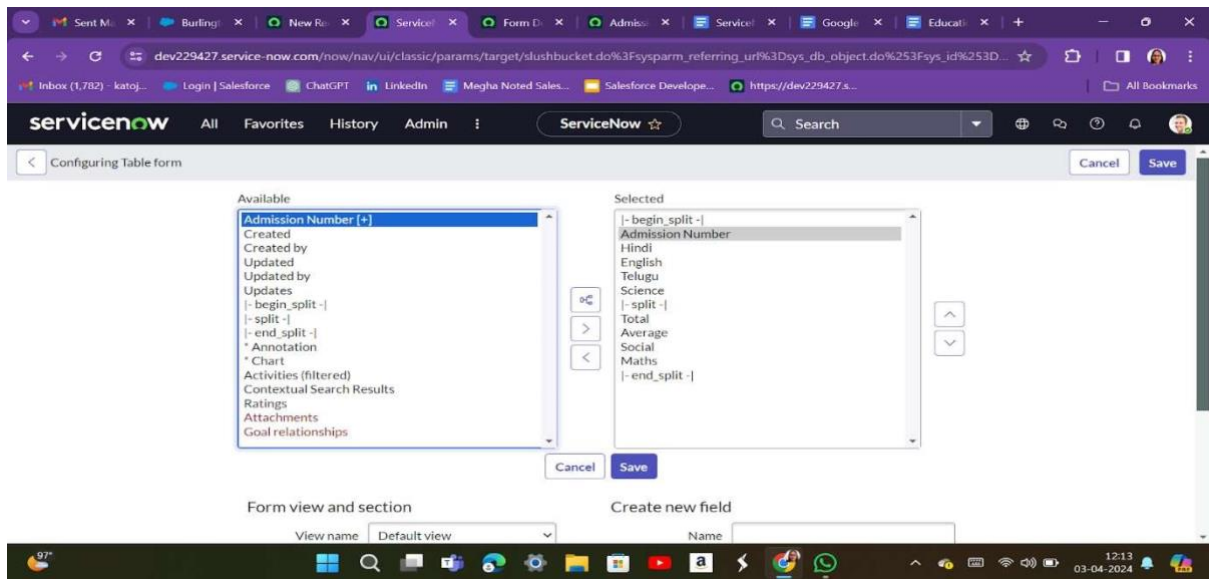
- In the Student Progress Table Page , Click on Layout form .

<	Table student progress			
X	Telugu	String	(empty)	40
X	Total	String	(empty)	40
+	Insert a new row...			

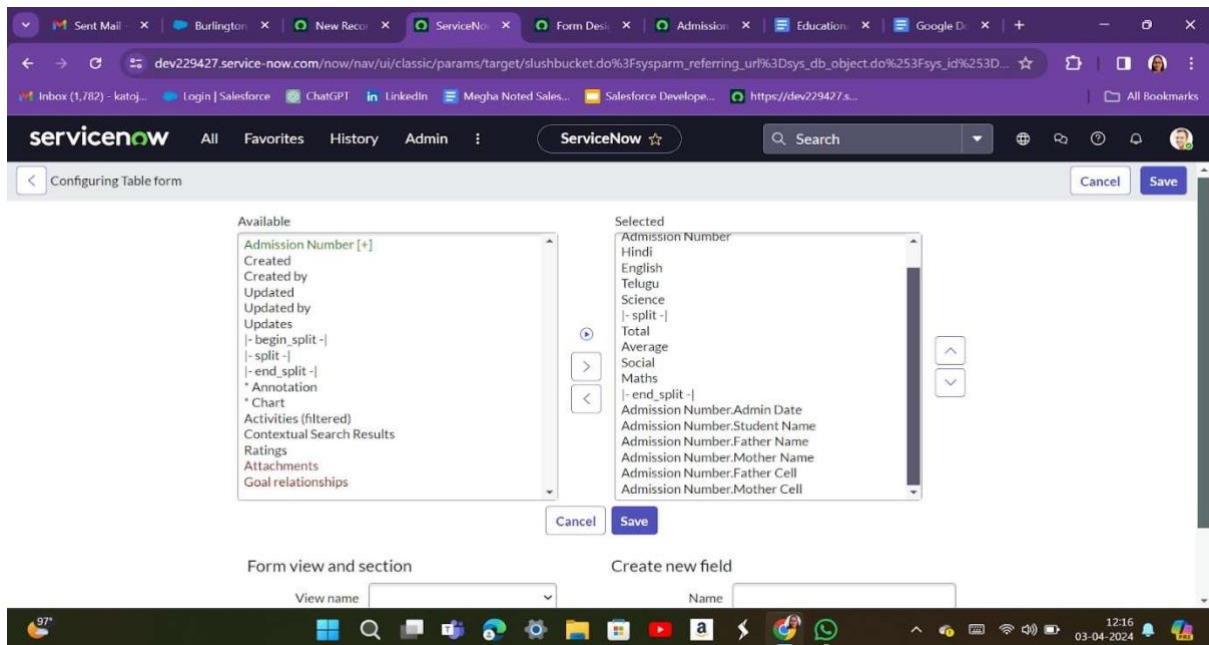
Update
Delete
Delete All Records

Related Links
Design Form
Layout Form
Layout List
Show Form
Show List
Show Schema Map
Add to Service Catalog
Run Point Scan
Explore REST API

- Click on Admission Number [+].

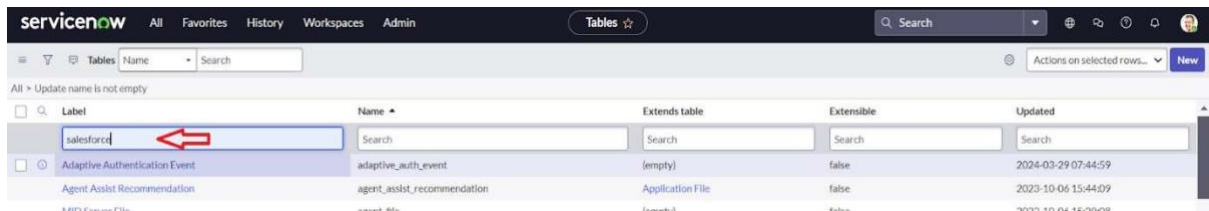


- Select below Admission Number fields in Available side and send it to selected side as below >> save.

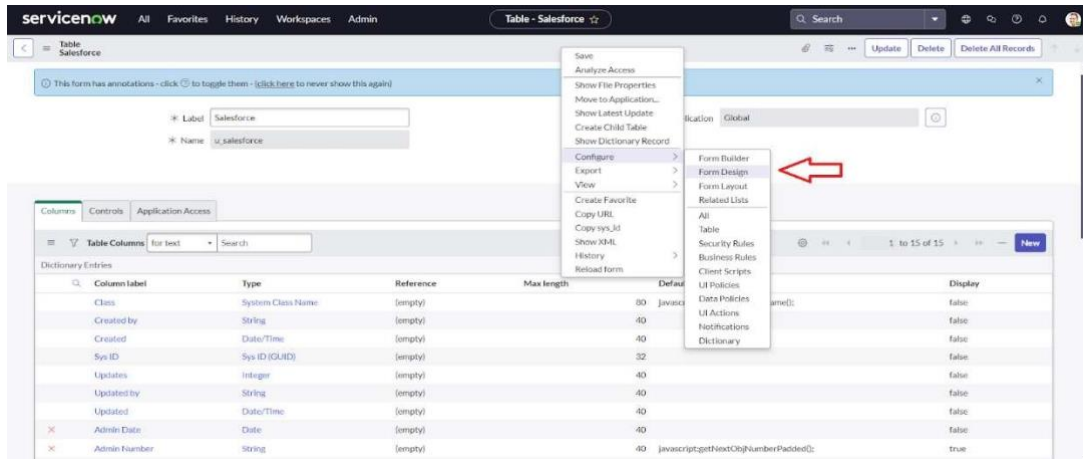


## Creating Form Design for Salesforce Table

1. All >> System Definition >> Tables .
2. In Label Search for Salesforce and open .



3. Right Click on top Toggle >> Configure >> Form Design.



4. In drop down select Salesforce(u\_salesforce).



5. Drag and drop the fields to the left side as below.



6. Save.

## Creating Form Design for Admission Table

Follow the same steps as Activity1, Configure the fields as below and Save.

## Creating Form Design for Student progress Table

Follow the same steps as Activity1, Configure the fields as below and Save.

## Creating Number Maintenance for Admin Number

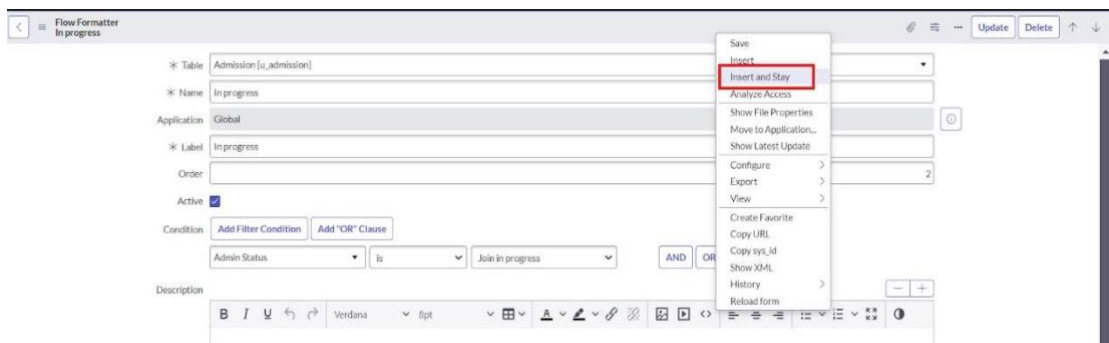
- All >> Number Maintenance >> New

- Fill the details >> Submit.

## Creating Process Flow for Admission Table

- All >> Process Flow>> New.
- Fill the Details as given Below

- Right Click on toggle and click on the save .
- Replace the Name and Label as below and click on Insert on stay.



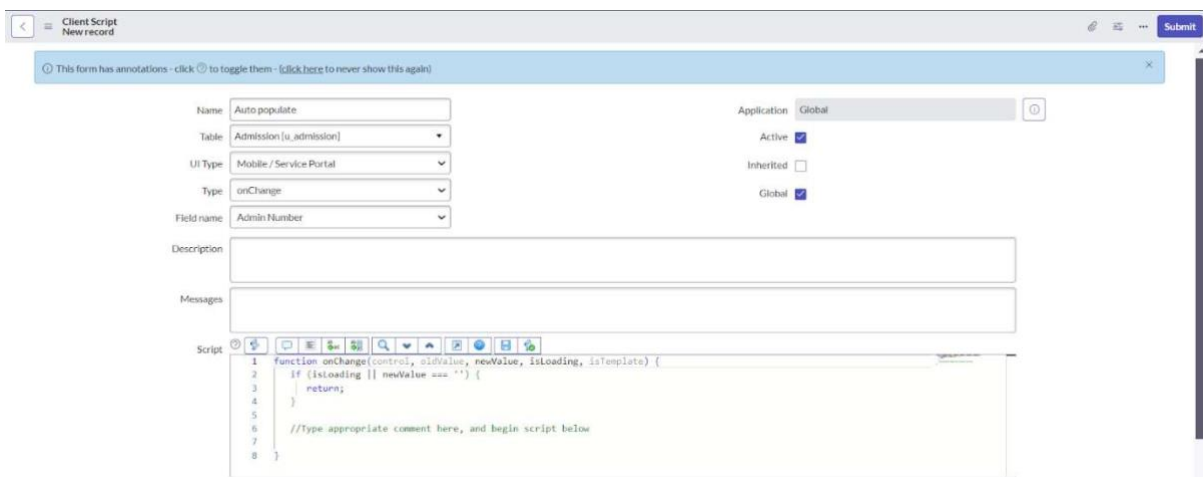
- Replace the Name and Label in order and click on Insert on stay.

Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

- Order should be New >> InProgress >> Joined >> Rejected >> Rejoined >> Closed >> Cancelled.

### Creating “Auto populate” Client Scripts for Admission Table

- All >> Client Scripts >> New.
- Fill the Details as given.



- Write the Code as below, Enable Isolate script and Save. function onChange(control, oldValue, newValue, isLoading, isTemplate) { if (isLoading || newValue === "") { return; }

```
//Type appropriate comment here, and begin script below  var a
= g_form.getReference('u_admission_number');
g_form.setValue('u_admin_date',a.u_admin_date);
g_form.setValue('u_grade',a.u_grade);
g_form.setValue('u_student_name',a.u_student_name);
g_form.setValue('u_father_name',a.u_father_name);
```

```
g_form.setValue('u_mother_name',a.u_mother_name);
g_form.setValue('u_father_cell',a.u_father_cell);
g_form.setValue('u_mother_cell',a.u_mother_cell);
```

```
g_form.setDisabled('u_admin_date',a.u_admin_date); g_form.setDisabled('u_grade',a.u_grade);
g_form.setDisabled('u_student_name',a.u_student_name);
g_form.setDisabled('u_father_name',a.u_father_name);
g_form.setDisabled('u_mother_name',a.u_mother_name);
g_form.setDisabled('u_father_cell',a.u_father_cell);
g_form.setDisabled('u_mother_cell',a.u_mother_cell);
}
```

Note: Make sure the Field names should be the same as you created .

### Creating “Pincode Update” Client Scripts for Admission Table

- Fill the Details as given.

The screenshot shows the 'Client Script' configuration window for a field named 'Pincode Update'. The configuration includes the following details:

- Name:** Pincode Update
- Table:** Admission[u\_admission]
- UI Type:** Desktop
- Type:** onChange
- Field name:** Pincode
- Application:** Global
- Active:** ☒
- Inherited:** ☐
- Global:** ☒

The 'Script' section contains the following code:

```
function onChange(control, oldValue, newValue, isLoading, isTemplate) {
    if (isLoading || newValue === '') {
        return;
    }
    var a = g_form.getValue('u_pincode');
    if(a == '589358')
    {
        g_form.setValue('u_mandal', 'kadthal');
        g_form.setValue('u_city', 'kadthal');
    }
}
```

- Write the Code as below, Enable Isolate script and Save. function

onChange(control, oldValue, newValue, isLoading, isTemplate) {

```

    if (isLoading || newValue === "") {
return;
    }
    var a = g_form.getValue('u_pincode'); if(a
=== '509358')
{
g_form.setValue('u_mandal', 'kadthal'); g_form.setValue('u_city',
'kadthal'); g_form.setValue('u_district', 'RangaReddy');

}
else if(a === '500081')
{
g_form.setValue('u_mandal', 'karmanghat'); g_form.setValue('u_city',
'karmanghat'); g_form.setValue('u_district', 'RangaReddy');

}
else if(a === '500079')
{
g_form.setValue('u_mandal', 'Abids'); g_form.setValue('u_city',
'AsifNagar'); g_form.setValue('u_district', 'Hyderabad');
}
}

```

//Type appropriate comment here, and begin script below

```

}

```

### Creating “Disable Fields” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the ServiceNow Client Script editor for a script named "Disable Fields". The script is associated with the "Student Progress [u\_student\_progress]" table and is triggered on the "onLoad" event. The script is set to be "Active" and "Global". The script code is as follows:

```

1 function onLoad() {
2     //Type appropriate comment here, and begin script below
3     g_form.setDisabled('u_total',true);
4     g_form.setDisabled('u_percentage',true);
5     g_form.setDisabled('u_result',true);
6 }

```

- Write the Code as below, Enable Isolate script and Save. function onLoad() {

//Type appropriate comment here, and begin script below

g\_form.setDisabled('u\_total',true); g\_form.setDisabled('u\_percentage',true);

g\_form.setDisabled('u\_result',true);

}

### Creating “Total Update” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the ServiceNow Client Script editor for a script named "Total Update". The script is associated with the "Student Progress [u\_student\_progress]" table and is triggered on the "onChange" event for the "Social" field. The script is set to be "Active" and "Global". The script code is as follows:

```

1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2     if (isLoading || newValue === '') {
3         return;
4     }
5
6     //Type appropriate comment here, and begin script below
7     if (newValue){
8         var a = parseInt(g_form.getValue('u_telugu'));
9         var b = parseInt(g_form.getValue('u_hindi'));
10        var c = parseInt(g_form.getValue('u_english'));
11        var d = parseInt(g_form.getValue('u_maths'));
12        var e = parseInt(g_form.getValue('u_science'));
13        var f = parseInt(g_form.getValue('u_social'));
14        var Total = parseInt(a+b+c+d+e+f);
15        g_form.setValue('u_total', Total);
16    }
17 }

```

- Write the Code as below, Enable Isolate script and Save. function

onChange(control, oldValue, newValue, isLoading, isTemplate) { //Type appropriate

comment here, and begin script below if (newValue){ var a =

parseInt(g\_form.getValue('u\_telugu')); var b = parseInt(g\_form.getValue('u\_hindi')); var

c = parseInt(g\_form.getValue('u\_english')); var d =

```

    if (isLoading || newValue === "") {
return;

    }
    parseInt(g_form.getValue('u_maths')); var e = parseInt(g_form.getValue('u_science'));

    var f = parseInt(g_form.getValue('u_social')); var Total = parseInt(a+b+c+d+e+f);

    g_form.setValue('u_total', Total);

}

}

```

## Creating “Result” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the 'Client Script' editor for the 'Result' field. The 'Table' is 'Student Progress [u\_student\_progress]', 'UI Type' is 'All', 'Type' is 'onChange', and 'Field name' is 'Percentage'. The script is as follows:

```

1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2   if (isLoading || newValue === '') {
3     return;
4   }
5
6   //Type appropriate comment here, and begin script below
7   if(newValue) {
8     var a = parseInt(g_form.getValue('u_percentage')); // Convert the value to an integer for comparison
9     if(a >= 0 && a <= 59){
10      g_form.setValue('u_result','Fail');
11    } else if(a >= 60 && a <= 100) {
12      g_form.setValue('u_result','Pass');
13    } else {

```

- Write the Code as below, Enable Isolate script and Save. function

```

onChange(control, oldValue, newValue, isLoading, isTemplate) {
    if (isLoading ||
newValue === "") {

return;

    }

    //Type appropriate comment here, and begin script below
    if(newValue) {
        var a =
parseInt(g_form.getValue('u_percentage')); // Convert the value to an integer for comparison

        if(a >= 0 && a <= 59){
g_form.setValue('u_result','Fail');
        }

    else if(a >= 60 && a <= 100) {
g_form.setValue('u_result','Pass');

    } else {

```

```

        // Handle the case if a is out of range (optional)

g_form.addErrorMessage('Percentage should be between 0 and 100.');
```

```

g_form.clearValue('u_result');

    }

}

}

```

### Creating “Percentage” Client Scripts for Student progress Table

- Fill the Details as given.

The screenshot shows the Salesforce Client Script editor interface. At the top, it says "You are editing a record in the Global application (cancel)". The record details are as follows:

- Name: Percentage
- Table: Student Progress [u\_student\_progress]
- UI Type: All
- Type: onChange
- Field name: Total
- Application: Global
- Active: ☒
- Inherited: ☐
- Global: ☒

The Description and Messages fields are empty. The Script area contains the following code:

```

1 function onChange(control, oldValue, newValue, isLoading, isTemplate) {
2   if (isLoading || newValue === '') {
3     return;
4   }
5
6   //Type appropriate comment here, and begin script below
7   var Total = g_form.getValue('u_total');
8   var Percentage = (Total/600)*100;
9   g_form.setValue('u_percentage',Percentage+'%');
10 }

```

The "Isolate script" checkbox is checked. At the bottom, there are "Update" and "Delete" buttons.

- Write the Code as below, Enable Isolate script and Save. function

```

onChange(control, oldValue, newValue, isLoading, isTemplate) { //Type appropriate
comment here, and begin script below  var Total = g_form.getValue('u_total');  var
Percentage = (Total/600)*100;  g_form.setValue('u_percentage',Percentage+'%');
}

```

### Result



```
if (isLoading || newValue === '') {  
  
return;  
  
}
```

←

Salesforce  
New record

🔍 ⚙️ ⋮

Submit

Admission Number

SAL0001078

Admission Date

Grade

-- None --

Student Name

Father Name

Mother Name

Mother Cell

Father Cell

Submit

←

Admission  
New record

🔍 ⚙️ ⋮

Submit

New

In progress

Joined

Rejected

Rejoined

Closed

Cancelled

Admission Number

Purpose of join

-- None --

Student Name

Father Name

Mother Name

Comments

Admission Date

Grade

-- None --

Fee

\$ + 0.00

Father Cell

Mother Cell

Admission Status

-- None --

School Details

Address

School Area

-- None --

School

-- None --

Submit

←

New Section  
New record

🔍 ⚙️ ⋮

Submit

Admission Number

Grade

-- None --

Student Name

Father Name

Mother Name

Father Cell

Mother Cell

Student Progress

Telugu

Hindi

English

Maths

Science

Social

Total

Percentage

Result

Submit