Execution Flow in Salesforce:

- ⇒ Record is loaded into the database server.
- ⇒Validation rule system[required,unique,email field(@)]
- ⇒Execute all before triggers
- ⇒custom validation rules
- ⇒ save your data in your database, but that data is not committed.
- ⇒Execute all after Trigger
- ⇒Execute assignment rules
- ⇒Execute auto response rule
- ⇒Execute Workflow rules
- ⇒Execute Process and flow
- ⇒Execute Escalation Rules
- ⇒Executes criteria based sharing settings
- ⇒commit
- ⇒Execute post commit logic–sending a mail.

MVC Pattern:

Model: Database part(Object,Fields,Relationships)

View: User Interface(Page Layouts, Visualforce Pages, Lightning Web Component)

Controller: it contains the logic of the application.

Standard Controller→name of standard or custom object.account

Custom Controller→name of the class

Extension Controller→user want to use two classes

Visualforce Pages: web development framework.

Visualforce Expressions: are used for the dynamic output.

{! !--Visualforce Expression--}

Global Variables: are used to get system values and resources.

Symbol for Global variables is: \$

Example: \$User,\$Action ,\$resource etc

Controllers: are apex classes that provide functionality to the visualforce pages.

Types of Controllers:

i)Standard Controller: is an in-built controller which means we do not need to provide functionality as it has been already defined and we are going to use that pre-defined functionality.

Standard Controllers are referred to on a Visualforce page using an attribute 'standardController' at the page element.

Menu_c Object- relation/table and class(Standard Controller)

All standard and custom objects do have standard controllers.

Ex: Account,contact,Lead,Menu__c,customer__c etc

All standard and custom objects can also have custom controllers.

Ex: CustomController1

Output components:

Are used to fetch and display output data on a visualforce page.

i)Outputfield-done

Input field

ii)OutputTex

Input text

iii)OutputLink

iv)detail-done

v)**PageBlockTable:** works for multiple records. It displays records in rows and columns. Required attributes are Value and var.

StandardList Controller: is used when you need to work with multiple records or record sets.

One extra attribute is added to the page element i.e 'recordSetVar'.

<apex:pagemessage> is a warning message including some attributes also like summary ,severity,detail and strength.

<apex:pagemessages> is an error message that appears on a screen whenever there is any custom or standard validation rule violated.

Custom controller→Name of a class is called cust	om controller.
<apex:selectoptions></apex:selectoptions>	
<apex:selectlist></apex:selectlist>	

Get and set is used for passing a value from class to VFPAGE.

- Q1.What is VisualForce?
- Q2.Can we use html, javascript and css style in the VisualForce page?
- Q3.What are Global Variables?Symbol of Global Variable
- Q4. What is a visual force expression?

{! expression}

- Q5. What is the root element/tag of a visual force page?
- Q6.What is the use of <apex:detail> tag?
- Q7. What all output elements are there in vf page?
- Q8.What is the MVC?
- Q9. What is a standard controller? How can we refer to a standard controller?
- Q10 What is page message and Page messages?
- Q11. What is a pageblock table? And 2 required attributes?
- Q12.What is recordsetvar?
- Q13.What is pageblockbutton?
- Q14 What are the different styles of html used in VfPage.
- Q15.What are the steps to create an external style file?

Q16.What are the steps to show images on VisualForce Page?

Q17. What are the steps to show visualforce page on a tab?

<apex:pagemessage>is a tag that is used to show information or warning messages.

Attributes: Detail, summary [warning, error] severity [warning, error], strength 1 to 3

<apex:pagemessages> is a tag that is used to show error messages like validation rules. Whenever there is an error, then page messages shown on a screen.

OutputLink: when a user wants to use an output link user can use **URLFOR**(DEFAULT KEYWORD)used for output link and one global variable \$Action which uses inbuilt functionality of edit, view and delete.

Filtration:is used to filter records or to select list view on the page and to display records on the basis of those listviews.

Filterid: property in which the selected list view's id gets stored

Listviewoptions: is a set of predfiend options that gives a predefined set of options of listviews.

Size:attribute to set the size of visible options in a list records

Scenario:

Create a vfrpage to show a list of menu records with the view,edit and delete option.
Styles: are used to make your vf pages attractive.
i)Inline style: is applied at the element means it cannot be reused.
For applying inline style you need to use the 'Style' keyword.
<apex:outputlink style="color:green"></apex:outputlink>
ii)internal style:is applied at the page level means, it can be reused on the elements of the same page.for applying internal style you need to use the <style> tag.</td></tr><tr><td>iii)External style:can be applied to the multiple pages means it is reusable.For using external style you need to use the static resource.These resources can be accessed using \$resource global variable.</td></tr></tbody></table></style>

Static Resource:

Use static resources to upload images that you want to use in the visualforce page.

Insert image in vfpage

```
<apex:image url="{!$resource.vegmenu}" height="100"
width="100"></apex:image>
```

Custom Controller:

Is an apex class that contains the code or logic for visualforce pages.we can write our own custom code for insert,update and delete and retrieve data from database etc.

Custom controllers can be referred with the keyword 'Controller'

Example

```
Public class xyz
{

Public xyz()
{
}

<apex:page controller="xyz"></a>
```

Methods in Custom Controller:

1)Getter Method: is used to return the values from a controller to the VF page.

Set method is used to set the value in variable.

Getter methods are defined with the 'get' keyword and then the identifier name.

getcalc()
getadd()

2c)Action Methods: are used to perform Functionality.

3) Navigation method: are used to navigate from one page to another.
→Pagereference is a navigation method class that is used to move to the next vfpage or any hyperlink like google or salesforce.
Ajax function:
Different deployment methods Change sets(sandbox)

Why to use sandbox

Eclipse with force.com

Force.com Migration tool--java based

Salesforce package

In case you are building apps that are depending on other APIS and other systems,to check their problems like configuration or settings the team wants a solution—>sandbox quickly assemble and allow developers to work in parallel for faster delivery.

Sandbox:

Sandboxes are special organisations that are used to test changes or new apps without risking damage to your production data or configuration.

Sandbox templates are used to create new sandboxes containing specific data sets.

Trial Period:30 days

How to start→

- 1. Click on google and write salesforce trial account
- 2. Click on Profession edition--30days trial
- 3. Already filled information is there or in case no information is there then it fills it.
- 4. Click on save--it directs you to on salesforce production
- 5. But the next step is to close the salesforce application and then go to gmail and then click on the verify account.

create a sandbox account:-->

- 1)check your mail, and click on the verified account to login into the sandbox.
- 2)Login from the verified account itself.
 - Open Both in a different tab one is Sandbox1 and other is production environment.
 - Users create some objects and Deploy on Production Organization.
 - For that Process user require a change set.
 - In the change set one organization uses inbound and Other organizations use Outbound set.
 - For example in this case sandbox(Outbound changeset) is used for creating custom objects and Production(Inbound) is used for deploying that object.
 - Click-->setup-->Deployment setting and set deployment setting for both.

Change Sets

A change set is a means by which one organization can send customizations to another organization.

- ::An outbound change set is a change set created in the organization you are logged into and want to send to another organization.
- ::An inbound change set is a change set that has been sent from another organization to the organization you are logged into.
- :: Change sets can only contain modifications you can make through the setup menu.
- ::Change sets may contain customizations to existing components or new components, but can't be used to delete or rename components.

Deployment Connections

In order for change sets to be sent from one organization to another, a deployment connection is required.

- ::A deployment connection is automatically created between all related organizations whenever a sandbox is created.
- ::Each organization must be authorized to send and receive change sets.
- ::The deployment connection list shows which organizations can upload changes to this organization, and which organizations allow this organization to upload changes to them.

How to set Connection

- 6. Go to production environment (RED icon for subscription)
- 7. Click on setup-->Deployment setting
- 8. Click on continue --> Connect is break line with sandbox1
- 9. Click on Edit-->sandbox1
- 10. Click on inbound change set[Select this option]
- 11. Goto sandbox1 environment
- 12. Click on setup-->Deployment setting
- 13. Changes connection is establish no break line line with green colour--sandbox1-->Almamate
- 14. Plus the outbound change set is selected.[sandbox1]
- 15. Now your object is ready to deploy in the production environment.

==> Create custom object on sandbox1

==>Deploy that custom object on production environment

==>Things to do in sandbox1

- 16.Click on setup-->outbound changeset(sandbox1)
- 17.Click on new
- 18. Click on changeset component --> Add
- 19. Click on app-->select your app and click on Add
- 20. Click on custom object --> select your object and click on Add
- 21. Check for dependencies also.
- 22.Click on Upload

==>Things to do in Production

Click on setup-->inbound changeset(production)

Click on First changeset

Click on validate

Click on upload