

Interview **Apex trigger** Solved Scenarios

The Accenture logo, featuring a purple chevron symbol above the word "accenture" in a bold, black, sans-serif font.The TCS logo, consisting of the lowercase letters "tcs" in a colorful, gradient font (red, orange, yellow, green, blue, purple) followed by the text "TATA CONSULTANCY SERVICES" in a blue, sans-serif font.The Cognizant logo, featuring a blue and white geometric icon (a stylized 'C' or a cube) followed by the word "cognizant" in a dark blue, sans-serif font.The Salesforce logo, featuring a blue square background with a white cloud shape in the center. The word "salesforce" is written in a blue, sans-serif font inside the cloud.The Infosys logo, featuring the word "Infosys" in a white, sans-serif font inside a solid blue rectangular box.

◀ SWIPE ▶

1. when ever a record is inserted to the account automatically inserted to the contact

```
trigger SCENARIO1 on Account (after insert) {  
    list<contact> c=new list<contact>();  
    for(account a:trigger.new)  
    {  
        contact b=new contact();  
        b.LastName=a.Name;  
        b.AccountId=a.Id;  
        c.add(b);  
    }  
    insert c;  
}
```

2. when ever a record is inserted to the contact automatically inserted to the account

```
trigger scenario2 on Contact (after insert) {  
    if(Recursive.flag)  
    {  
        Recursive.flag=false;  
        list<account>a=new list<account>();  
        for(contact c:trigger.new)  
        {  
            account a1=new account();  
            a1.Phone=c.Phone;  
            a1.Name=c.LastName;  
            a.add(a1);  
        }  
        insert a;  
    }  
}
```

Recursive trigger fire:

3. avoid recursive trigger

```
public class Recursive {  
    public static boolean flag=true;  
}
```

3. when ever a create opportunity object record updated total opportunies and total amount in account object

```
trigger scenario24 on Opportunity (after insert) {  
    set<id>ids=new set<id>();  
    for(Opportunity op:trigger.new)
```

```
{  
    ids.add(op.accountid);  
}  
list<account>ac=[select Total_opportunities__c,Total_Amount__c,(select id,Amount from Opportunities ) from a  
ccount where id=:ids];  
for(account a:ac)  
{  
    a.Total_opportunities__c=a.opportunities.size();  
    decimal sum=0;  
    for(opportunity p:a.opportunities)  
    {  
        sum=sum+p.amount;  
    }  
    a.Total_Amount__c=sum;  
  
}  
update ac;  
}
```

4. contact object when ever department equal to cse automatically before inserted email field

```
trigger scenario4 on Contact (before insert) {  
    for(contact c:trigger.new)  
    {  
        if(c.Department=='CSE')  
        {  
            c.Email='naveengorentlal@gmail.com';  
        }  
    }  
}
```

5. when ever we modify inputout object doctorname automatically update droppoff object text field no relation ship

```
trigger SCENARIO32 on Inputout__c (after update) {  
  list<Dropoffl__c>d=[select id,name,Text__c from Dropoffl__c where Text__c='naveen'];  
  string name;  
  for(Inputout__c c:trigger.new)  
  {  
    name=c.Doctor_Name__c;  
  }  
  for(Dropoffl__c dp:d)  
  {  
    dp.Text__c=name;  
  }  
  update d;  
  
}
```

6.limit reached the records

```
trigger SCENARIO6 on Account (before insert,before update) {  
  integer count=0;  
  list<account>a=[select id,name from account where createddate=today or lastmodifieddate=today];  
  for(account ac:trigger.new)  
  {  
    count=a.size();  
    ac.NumberofLocations__c=count;  
    if(count>2)  
    {  
      ac.adderror('reached limit today');  
    }  
  }  
  
}
```

=====

7.can not inser/update/delete that user account object records

```
trigger scenario30 on Account (before insert,before update,before delete) {
user u=[select id,name from user where username='naveensfdc98@gmail.com'];
if(u.id==userinfo.getUserId())
{
if(trigger.isdelete)
{
for(account a:trigger.old)
{
a.adderror('cant delete record');

}
}
if(trigger.isupdate)
{
for(account b:trigger.new)
{
b.adderror('can not update');
}
}
if(trigger.isinsert)
{
for(account c:trigger.new)
{
c.adderror('can not insert');
}
}
}
}
```

=====

8.already existing records display error message

```
trigger scenario8 on Contact (before insert) {  
list<string>st=new list<string>();
```

```
for(contact c:trigger.new)  
{  
list<contact>a=[select id,name,Email,lastname from contact where Email=:c.Email];  
if(a.size()>0)  
{  
c.Email.adderror('already existing');  
}  
}  
}
```

for loop without query

```
trigger duplicatettrigger on Inputout__c (before insert) {  
set<string>s=new set<string>();  
for(Inputout__c op:trigger.new)  
{  
s.add(op.Doctor_Name__c);  
}  
list<Inputout__c>d=[select id,Doctor_Name__c from Inputout__c where Doctor_Name__c=:s];  
set<string>dupids=new set<string>();  
for(Inputout__c don:d)  
{  
dupids.add(don.Doctor_Name__c);  
}  
for(Inputout__c c:trigger.new)  
{  
if(c.Doctor_Name__c!=null)  
{  
if(dupids.contains(c.Doctor_Name__c))  
{  
c.Doctor_Name__c.adderror('already existing record');  
}  
}  
}  
}
```

9. count of related contacts and accounts field display size

```
public class rollupsummery {
```

```
    public static void increment(list<contact>con)
    {
        set<id>ids=new set<id>();
```

```
        for(contact c:con)
        {
            ids.add(c.accountid);
        }
        list<account>a=[select id,name,NumberOfEmployees,(select id,lastname from contacts) from account where id
        =:ids];
        for(account ac:a)
        {
            ac.NumberOfEmployees=ac.contacts.size();

        }
        update a;

    }

}
```

```
trigger:
```

```
trigger scenario11 on Contact (after insert) {
    rollupsummery.increment(trigger.new);

}
```

10. when ever opportunity stagename =closedwon automatically update the account field rating=hot

```
trigger scenario12 on Opportunity (after insert,after update) {
set<id>ids=new set<id>();
list<account>ac=new list<account>();
for(opportunity op:trigger.new)
{
ids.add(op.AccountId);

ac=[select id,name,rating from account where id=:ids];
if(op.StageName=='Closed won')
{

for(account a:ac)
{
a.Rating='hot';
}
update ac;
}
}

}
```

11.when ever account name is naveen automatically update the contact all lastnames

```
trigger scenario13 on Account (after update) {

string names;
```

```
list<contact>c=[select id,lastname,firstname from contact where lastname=:names ];
for(account a:trigger.new)
{
names=a.name;
}
for(contact con:c)
{
con.lastname=names;
}
update c;

}
```

12. when ever a opportunity created record amount field is calculated by account total field

```
trigger scenario21 on Opportunity (after insert,after update,after delete) {
    set<id>ids=new set<id>();
    map<id,opportunity>opp=new map<id,opportunity>();
    Decimal oldVal;
    Decimal newVal;
    if(trigger.isinsert)
    {
        for(opportunity op:trigger.new)

        {
            ids.add(op.AccountId);
            opp.put(op.AccountId, op);
        }
        list<account> acc=[select id,Total_Amount__c from account where id=:ids];
        for(account a:acc)
        {
            if(a.Total_Amount__c==null )
            {
                a.Total_Amount__c=opp.get(a.Id).amount;
            }
            else
            {

                a.Total_Amount__c= a.Total_Amount__c+opp.get(a.Id).amount;
            }
        }
        update acc;
    }
    if(trigger.isUpdate)
    {
        for(opportunity op:trigger.new)

        {
            ids.add(op.AccountId);
            opp.put(op.AccountId, op);
            newVal=op.Amount;
        }
    }
}
```

14. when ever create a contact automatically update opprtunity fields

```
trigger scenario17 on Contact (after insert) {
list<opportunity>op=[select id,name,stageName,Description,amount from opportunity limit 50];
for(contact c:trigger.new){
for(opportunity o:op)
{
if(o.amount<5000||o.Amount==null)
{
o.amount=5000;
o.Name=o.Name+'Mr';
o.StageName='prospecting';

}
else{
o.Amount=o.Amount+1000;
o.Name=o.Name+'Dr';
}
update o;
}
}
}
```

15. Whenever new account is created, its rating should be hot.

```
trigger AccTrig on Account (before insert) {

    for (Account a:trigger.new){

        a.rating = 'Hot';
    }

}
```

16. Make a Fax field mandatory in Account using trigger.

```
trigger AccTrig on Account (before insert) {  
  
    for (Account a:trigger.new){  
        if (a.fax == Null){  
            a.fax.addError('Fax field is mandatory');  
        }  
    }  
}
```

17. Whenever a new contact is created, prefix the firstname with Mr.

```
trigger Contrig on Contact (before insert) {  
  
    for (contact c:Trigger.new){  
  
        c.salutation = 'Mr';  
    }  
  
}
```

18. Prevent the insertion of an account, if you already have an account with the same name
(Prevent the insertion of a duplicate account).

```
trigger AccountDuplicate on Account (before insert)
{

    Set<String> setName = new Set<String>();
    For(Account acc : trigger.new)
    {
        setName.add(acc.name);
    }

    if(setName.size() > 0 )
    {
        List<Account> lstAccount = [select name ,id from account where name in :setName ];

        Map<String ,Account> mapNameWiseAccount = new Map<String,Account>();
        For(Account acc: lstAccount)
        {
            mapNameWiseAccount.put(acc.name ,acc);
        }

        For(Account acc : trigger.new)
        {
            if(mapNameWiseAccount.containsKey(acc.name))
            {
                acc.Name.addError('Name already Exist ');
            }
        }
    }
}
```

19. Whenever a new contact is inserted in the system, update the accounts phone field with the contacts phone field.

TRIGGER :

```
trigger contactTrigger on Contact (before insert, before update, before delete, after insert, after update, after delete, after undelete) {
```

```
    if(trigger.isBefore ){
        system.debug('I am before trigger ');
    }
```

```
    else if(trigger.isAfter){
        system.debug('I am after trigger ');
        if(trigger.isUpdate){
            contactTriggerHandler.afterUpdateHelper(trigger.new);
        }
    }
```

HANDLER CLASS :

```
public class contactTriggerHandler {
```

```
    public static void afterUpdateHelper(List<Contact> conList){
```

```
        Set<Id> setId = new Set<Id>();
        for(Contact con:conList){
            setId.add(con.AccountId);
        }
        system.debug('setId ' + setId);
```

```
        List<Account> accItemlList = [Select Id, Name, Phone, (Select Id, FirstName, LastName, Phone, AccountId From Contacts) From Account Where Id IN:setId];
```

```
        for(Account a1:accItemlList){
            for(Contact c1:a1.Contacts){
                if(c1.Phone !=null){
                    a1.Phone = c1.Phone;
                    update accItemlList;
```

```
                }
            }
        }
    }
```

20. Create a contact whenever a new account is created.

```
trigger AccTrig2 on Account (after insert) {  
  
    set<id> Accid = new set<id>();  
    list<Contact> ContList = new List<Contact>();  
  
    for (Account a:Trigger.new){  
        Accid.add(a.id);  
  
        contact c = new contact();  
  
        c.AccountId = a.id;  
        c.lastName = a.name;  
        c.phone = a.phone;  
        contList.add(c);  
    }  
    insert contList;  
}
```

21. Prevent to delete account if they have related opportunity

```
trigger DeleteAccountOpportunity1 on Account (before delete)  
{  
    List<Opportunity> opp = [Select accountId from opportunity where accountId in :TRIGGER.OLD];  
    for(Account a : Trigger.OLD)  
    {  
        for(Opportunity o : Opp)  
        {  
            if(a.id == o.accountId)  
            {  
                a.addError('Account have Opportunity ,so you can not delete this Account');  
            }  
        }  
    }  
}
```

23. Trigger will prevent the user to delete records from account

```
trigger test6 on Account (before delete) {  
    for (Account A:Trigger.old){  
        A.addError(' You can not delete the record, Please contact your Administartator');  
    }  
}
```

24. Prevent user from creating duplicate accounts with same name

```
trigger AccountDuplicate on Account (before insert)  
{  
  
    Set<String> setName = new Set<String>();  
    For(Account acc : trigger.new)  
    {  
        setName.add(acc.name);  
    }  
  
    if(setName.size() > 0 )  
    {  
        List<Account> lstAccount = [select name ,id from account where name in :setName ];  
  
        Map<String ,Account> mapNameWiseAccount = new Map<String,Account>();  
  
  
        For(Account acc: lstAccount)  
        {  
            mapNameWiseAccount.put(acc.name ,acc);  
        }  
  
        For(Account acc : trigger.new)  
        {  
            if(mapNameWiseAccount.containsKey(acc.name))  
            {  
                acc.Name.addError('Name already Exist ');  
            }  
        }  
    }  
}
```

25. Add a prefix dr to all leads names whenever a record is updated or inserted

```
trigger Leadtrig on Lead (before insert, before update) {  
    for (Lead l:Trigger.new){  
        l.Firstname = 'Dr. ' + l.FirstName;  
    }  
}
```

26. Prevent user to delete contact which is associated with any account.

```
trigger TrigContact on Contact (before delete) {  
    for (contact c:Trigger.old){  
        if(c.AccountId != Null){  
            c.addError('Can not delete contact');  
        }  
    }  
}
```

27. Throw an error if phone number is not 10 dight of length

```
trigger AccTrig23 on Account (before insert, BEFORE UPDATE) {  
    for (Account a:Trigger.new){  
        if (a.phone.length() != 10){  
            a.phone.addError('Phone length is not 10');  
        }  
    }  
}
```

28. Whenever contact is created update status field from it's associate account

29. Whenever new record is created in account object, before this record inserted in account object Account, delete all contact records available with the same name

30. when ever a record is inserted to the Account automatically inserted to the Contact

```
trigger SCENARIO1 on Account (after insert) {
    list<contact> c=new list<contact>();
    for(account a:trigger.new)
    {
        contact b = new contact();
        b.LastName = a.Name;
        b.AccountId = a.Id;
        c.add(b);
    }
    insert c;
}
```

31. when ever a create opportunity object record updated total opportunies and total amount in account object

```
trigger scenario24 on Opportunity (after insert) {
    set<id> ids = new set<id>();
    for(Opportunity op:trigger.new)
    {
        ids.add(op.accountid);
    }
    list<account>ac=[select Total_opportunities__c,Total_Amount__c,(select id,Amount from Opportunities ) from
m a
ccount where id=:ids];
    for(account a:ac)
    {
        a.Total_opportunities__c=a.opportunities.size();
        decimal sum=0;
        for(opportunity p:a.opportunities)
        {
            sum=sum+p.amount;
        }
        a.Total_Amount__c=sum;

    }
    update ac;
}
```

32. can not inser/update/delete that user account object records

```
trigger AccountDuplicate on Account (before insert, before update, before delete){  
    for (Account a:Trigger.new){  
        a.addError("Need to contact Amin for access");  
    }  
}
```

33. whenever opportunity StageName = Closed Won automatically update the account field Rating = Hot

```
trigger updateAccountRating on opportunity (after insert, after update){  
    list<Id> accIds = new list<Id>();  
    list<Account> accounts = new list<account>();  
    for(opportunity o:trigger.new){  
        accIds.add(o.accountId);  
    }  
    for(account a:[select Id, Rating from account where Id IN :accIds]){  
        for(opportunity opp:trigger.new){  
            if(opp.stage=='closed won'){  
                a.Rating='hot';  
                accounts.add(a);  
            }  
        }  
    }  
    update accounts;  
}
```

34. name field is updated on account then put name field as name + Phone

```
trigger AccountDuplicate on Account (before update){  
    for (Account a:Trigger.new){  
        if (a.name != Trigger.oldMap.get(a.Id).name){  
            a.name = a.name + trigger.oldMap.get(a.id).phone;  
        }  
    }  
}
```

35. Whenever account is created with annual revenue more than 50000, then add Pranay mehare as contact Name ::
DONE (Check 50 k and insert contact)

```
trigger test5 on Account (before insert) {  
    list<Contact> ContList = new List<Contact>();
```

```
    // set<Id> AccIdsSet = new Set<Id>();  
    for (Account Acc:Trigger.new){  
        if (Acc.AnnualRevenue > 50000){  
            Contact cont = new contact();  
  
            Cont.AccountId = Acc.Id;  
            Cont.Firstname = 'Pranay';  
            Cont.Lastname = 'Mehare';  
            ContList.add(Cont);  
        }  
    }  
    Insert ContList;  
}
```

36. Whenever Lead is created with lead Source as WEB then give rating as COLD otherwise HOT

```
trigger test56 on Lead (before insert) {  
    for (Lead l:Trigger.New){  
        if (l.leadSource == 'Web'){  
            l.Rating = 'Cold';  
        }  
        Else {  
            l.Rating = 'Hot';  
        }  
    }  
}
```

37. Prevent Account from deleting if it has 2 or more contacts..

```
trigger Account1 on Account (before Delete) {

    set<Id> AccIds = new set<Id>();
    Map<Id, Account> AccMap = new Map<Id, Account>();    // need to store map

    for (Account A:Trigger.old){

        AccIds.add(A.Id);
    }
    for (Account A:[SELECT Id, Name, (SELECT Id, Firstname, LastName FROM Contacts) FROM ACCOU
NT WHERE Id IN :AccIds]){
        AccMap.put(A.Id, A);
    }
    for (Account A1:Trigger.Old){

        if (AccMap.get(A1.Id).contacts.Size() >= 2){
            A1.addError('You Can not delete Account');
        }
    }
}
```

38. While creating or updating Lead check whether Email is already there in existing contact , if it is there then throw an error.

//Unrelated Objects ::

```
trigger Lead1 on Lead (before insert, before update) {
    map<string, contact> contMap = new map<string, contact>();
    list<contact> contEmail = [SELECT Id, Email FROM Contact];

    for (contact c:contEmail){

        contMap.put(c.Email, c);
    }
    for (lead l:Trigger.new){

        if ((l.email != null) && (trigger.isInsert || (l.email != Trigger.oldMap.get(l.Id).Email))){
            if (contMap.containsKey(l.email)){
                l.Email.addError('Email already exist');
            }
        }
    }
}
```

39. Whenever phone is modified on account object then update contact record with phone field (other phone with old value and home phone with new value) associated with account record.

```
trigger updatePhone on Account (after update) {  
  
    Set<Id> accIdSet = new Set<Id>();  
    for(Account acc : Trigger.New){  
        if(acc.Phone!=trigger.oldmap.get(acc.Id).Phone){  
            accIdSet.add(acc.Id);  
        }  
    }  
    list<contact> conlist = new list<contact>();  
    for(Contact con : [select Id,AccountId from Contact Where AccountId In : accIdSet]){  
  
        con.HomePhone=trigger.newmap.get(con.AccountId).Phone;  
        con.OtherPhone = trigger.oldmap.get(con.AccountId).Phone;  
        conlist.add(con);  
    }  
  
    update conlist;  
}
```

40. Counts number of contacts on Account using trigger (Create Lookup Summary field using Trigger)

Note : Object CONTACT [Very important]

TRIGGER :

```
trigger ContCount on Contact (After Delete, After Insert, After Update, After Undelete) {  
  
    If (Trigger.isInsert || Trigger.isDelete || Trigger.isUpdate || Trigger.isUndelete){  
  
        CountContact.ContContacts (Trigger.New, Trigger.Old);  
    }  
}
```

HANDLER CLASS :

```
Public class CountContact {
    Public static void ContContacts (list<Contact> NewContact, List<Contact> oldContact){

        set<id> ContAccIds = new set<Id>();

        try{
            if (NewContact != Null){
                for (Contact con:newContact){
                    if(Con.AccountId != Null){
                        ContAccIds.add(con.AccountId);
                    }
                }
            }

            if (oldContact != Null){
                for (Contact con:oldContact){
                    if(Con.AccountId != Null){
                        ContAccIds.add(con.AccountId);
                    }
                }
            }
        }

        List<Account> AccList = [SELECT Id, ContCount__c, (SELECT Id FROM Contacts) FROM Account
        t Where Id IN :ContAccIds];

        if (AccList != Null){
            for (Account AccValue:AccList){
                accvalue.ContCount__c = accValue.Contacts.Size();
            }
        }

        if(!AccList.isEmpty()){
            update AccList;
        }

        Catch (Exception e){
            System.debug ('Get Message' + e.getMessage());
        }
    }
}
```

41. Recursion in Trigger

TRIGGER :

Trigger TrigCont on Contact (Before insert){

if (trigger.isinsert && Trigger.isBefore && CreateCont.isFirst){ //TRIGGER WILL RUN AFTER ISFIRST CHECK

CreateCont = false; //TO AVOID RECURSION

createCont.CreateConts(Trigger.New);

}

HANDLER :

Public class CreateCont{

public static Boolean isFirst = true; //TO AVOID RECURSION

public static void (List<Contact> conList) {

List<Contact> cList = new List<Contact> ();

for (Contact c: conList){

contact c = new Contact;
c.firstName = 'Recursive';
c.LastName = 'Trigger';

cList.add(c);

}

if (!cList.isEmpty()){
insert cList
}

}

}
