12. Write a trigger to Update Number of contacts filed in Account when Contact is Updated or Deleted or Undeleted.

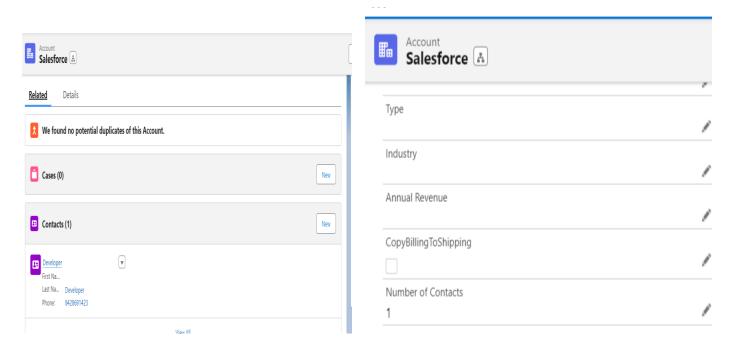
**Object: Contact** 

```
Trigger ContactTrigger on Contact (After Update, After Delete, After
Undelete)
 {
      If (Trigger.isAfter)
      {
       If (Trigger. IsUpdate)
        {
          ContactTriggerHandler.UpadteAccInUpdate(Trigger.new,
Trigger.OldMap);
        }
       If (Trigger. IsDelete)
       {
          ContactTriggerHandler.UpadeteAccInDelete(Trigger. Old);
       }
      If (Trigger. IsUndelete)
      {
         ContactTriggerHandler.UpdateAccInUndelet(Trigger.new);
      }
    }
 }
    // Calling the handler Class to Execute the trigger......
```

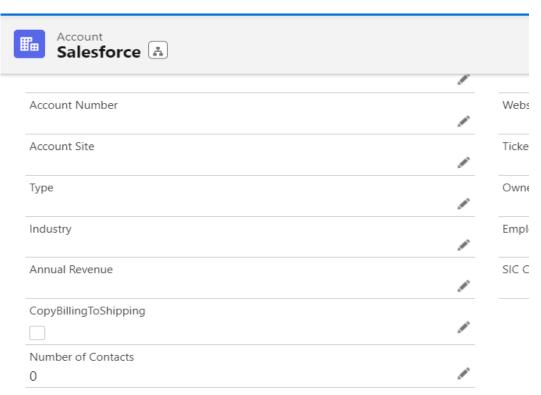
```
Public class ContactTriggerHandler
{
 Public static void
UpadteAccInUpdate(List<Contact>Conlist,Map<id,Contact>Oldmap)
 {
     set<id>accids = new set<id>();
     For (Contact C:Conlist)
      {
        if(C.AccountId!=null)
         {
          accids.add(C.AccountId);
          If (Oldmap.ContainsKey(C.Id) && Oldmap.get(C.Id).AccountId!=
C.AccountId)
             {
               accids.add(Oldmap.get(C.Id).AccountId);
             }
        }
      }
 Map<id,Account>Accmap = new map<id,Account>([select
id ,Number_of_Contacts__c,(select id from contacts) from Account where id
IN :accids]);
List<Account>Accup = new list<Account> ();
 for (Account A:Accmap.Values())
 {
    A.Number_of_Contacts__c = A.Contacts.size();
    Accup.add(A);
 }
Update Accup;
```

}

# Initially this Account has one Contact I am updating the contact to another Account see the result....

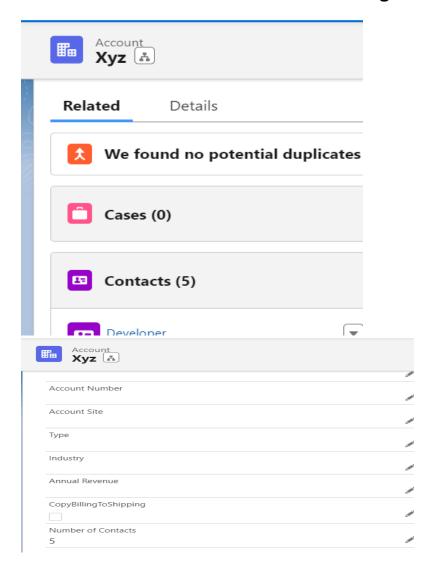


## After Updating ....

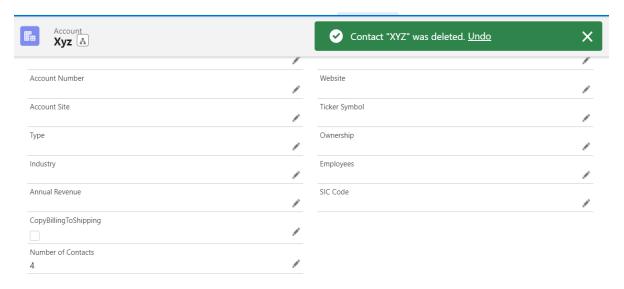


```
Public static void UpadeteAccInDelete(List<Contact>Conlist)
{
  set<id>accids = new set<id>();
  for (Contact C: Conlist)
   {
     if(C.AccountId!=null)
    {
      accids.add(C.AccountId);
    }
   }
Map<id,Account>Accmap = new map<id,Account> ([select
id ,Number_of_Contacts__c,(select id from contacts) from Account where id
IN :accids]);
List<Account>Accup = new list<Account>();
  for (Account A: Accmap.values())
   {
    A.Number_of_Contacts__c = A.Contacts.size();
    Accup.add(A);
   }
 Update Accup;
}
```

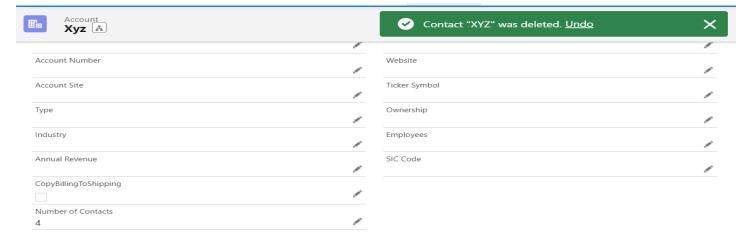
## This Account Has 5 contacts after deleting see the result...



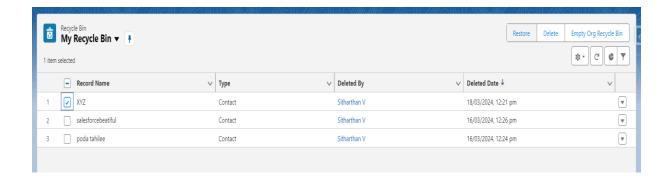
#### Result:



```
Public static void UpdateAccInUndelet(List<Contact>Conlist)
{
   set<id>accids = new set<id>();
     for (Contact C:Conlist)
        {
          if(C.AccountId!=null)
          {
            accids.add(C.AccountId);
          }
        }
Map<id,Account>Accmap = new map<id,Account>([select
id ,Number_of_Contacts__c,(select id from contacts) from Account where id IN :accids]);
List<Account>Accup = new list<Account>();
for(Account A:Accmap.values())
 {
   A.Number_of_Contacts__c = A.Contacts.size();
   Accup.add(A);
 }
 Update Accup;
 This Account had 4 contact after restoring one contact see the result.....
```



## Restoring the Contact related to Xyz Account......



### After Restoring ......

