Trigger Scenario :

How would you create a trigger in Salesforce that updates a custom field on the Account object to reflect the total number of related Opportunity records, specifically those with the "Closed Won" stage, every time an Opportunity is inserted, updated, deleted, or undeleted?

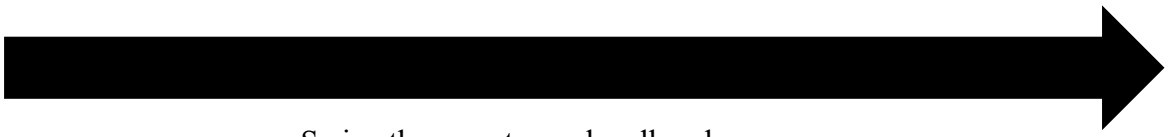
Trigger on Object : Opportunity

Event : After

Operation : Insert, Update,Delete ,Undelete

Opportunity Trigger :

```
trigger OpportunityTrigger on Opportunity (After Insert,After update,After Delete, After Undelete) {

OpportunityTriggerHandler obj = new OpportunityTriggerHandler();
obj.doAction();
}
```



Swipe the page to see handler class.

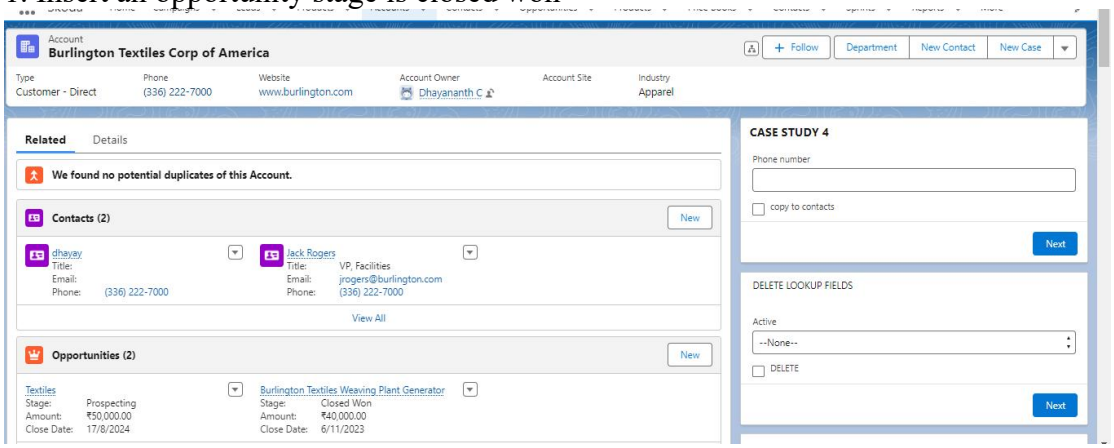
Trigger Handler on Opportunity :

```
public class OpportunityTriggerHandler {

   List<Opportunity> triggerNew;
   List<Opportunity> triggerOld;
   Map<id,Opportunity> triggerNewMap;
   Map<id,Opportunity> triggerOldMap;

   public OpportunityTriggerHandler(){

      triggerNew = (list<Opportunity>) trigger.New;
      triggerOld = (list<Opportunity> )trigger.Old;
      triggerNewMap =(Map<id,Opportunity>) trigger.Newmap;
      triggerOldmap =(Map<id,Opportunity> )trigger.Oldmap;

   }
   public void doAction(){

      Switch on trigger.OperationType{

         when BEFORE_INSERT{

         }
         when BEFORE_UPDATE{

         }
         when AFTER_INSERT{
            countTotalChild(TriggerNew);
         }
         when AFTER_UPDATE{
            countTotalChild(TriggerNew);
         }
         when BEFORE_DELETE{

         }
         when AFTER_DELETE{
            countTotalChild(TriggerOld);
         }
         when AFTER_UNDELETE{
            countTotalChild(TriggerNew);
         }
      }
   }
```

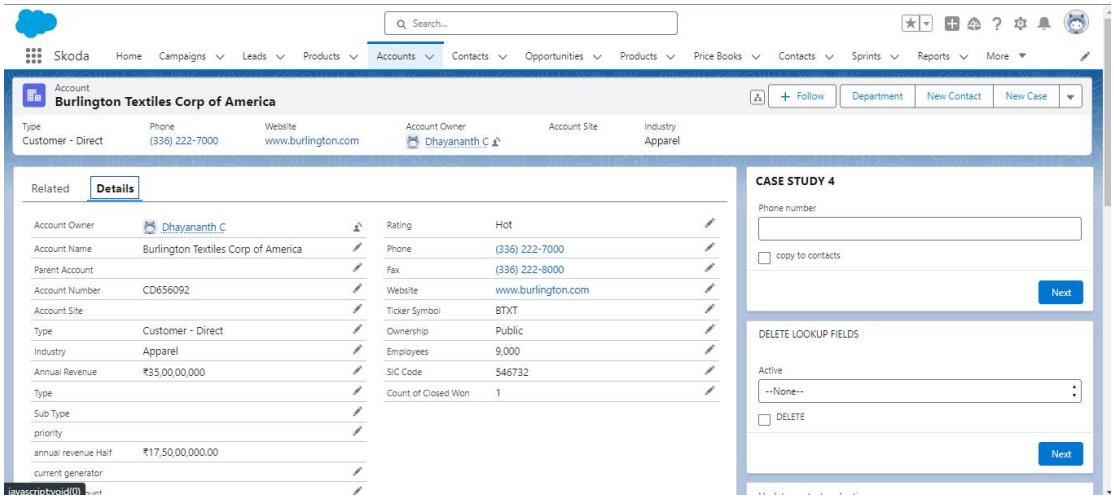
```
   public void countTotalChild(List<opportunity> opplist){

      set<id> accountIds = new Set<id>();
      for(Opportunity Opportunityid:opplist){
         if(opportunityId.AccountId !=Null){
            if(trigger.isUpdate){

if(triggerOldMap.get(Opportunityid.Id).StageName!=Opportunityid.StageName){

                  accountIds.add(opportunityId.AccountId);
               }
            }
                  else
            {
               accountIds.add(opportunityId.AccountId);
            }
         }
      }

      if(accountIds.size()>0){
         List<AggregateResult> aggreResult = [select
                                    count(id)Total_number_opp ,accountId,StageName
                                     From Opportunity
                                     Where accountId =:accountIds
                                     Group by accountId,StageName
                                     having StageName = 'Closed Won'];

         List<account> accountList = new List<account>();

         for(AggregateResult AggregateRecord : aggreResult){

            Account obj = new Account();
 obj.Id=  (id)AggregateRecord.get('accountId'); // it is an Sobject so we need to
typecaste as ID

obj.Count_of_Closed_Won__c=(integer)AggregateRecord.get('Total_number_opp');
            accountList.add(obj);
         }
         if(accountList.size()>0){
            update accountList;

         }
      }
   }
}
```

Output :

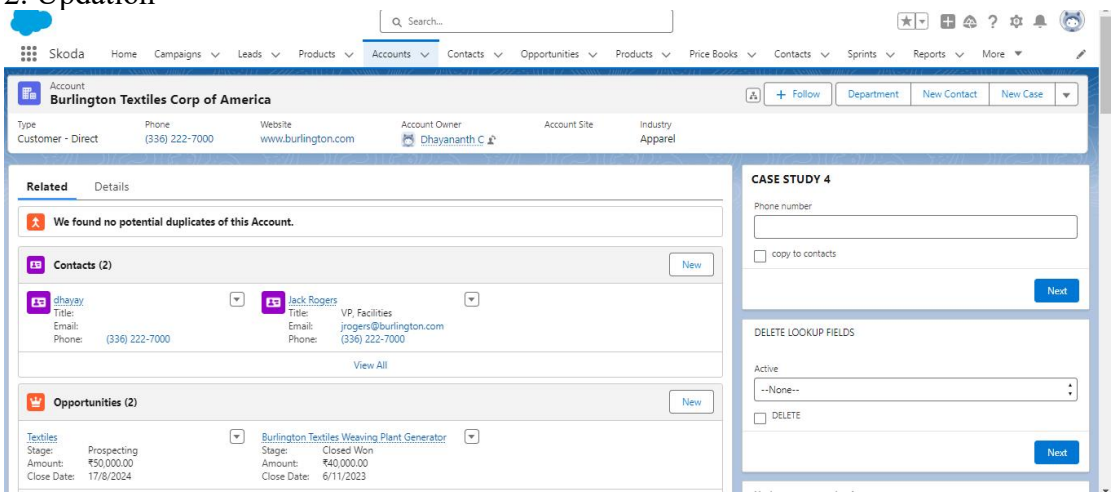
1. Insert an opportunity stage is closed won



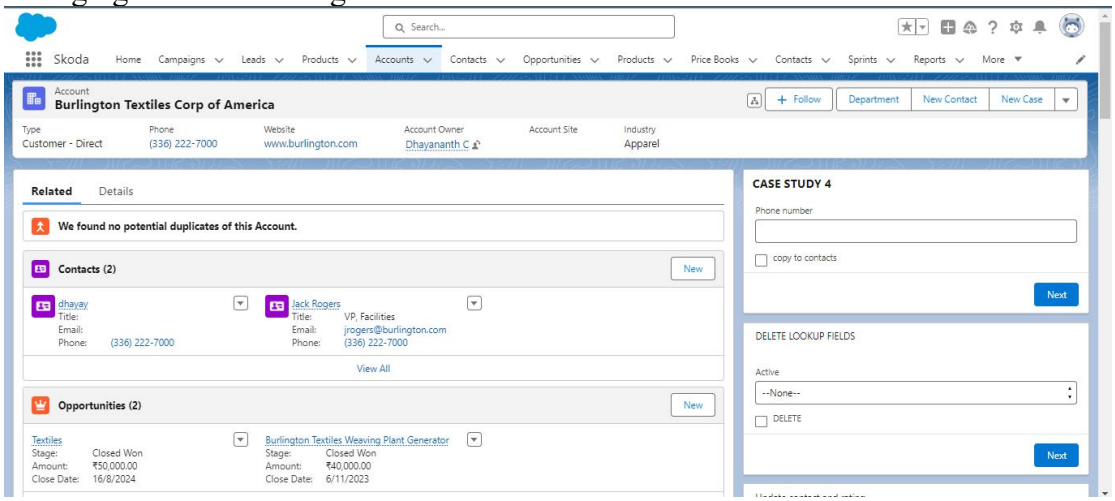
The count will be one



2. Updation

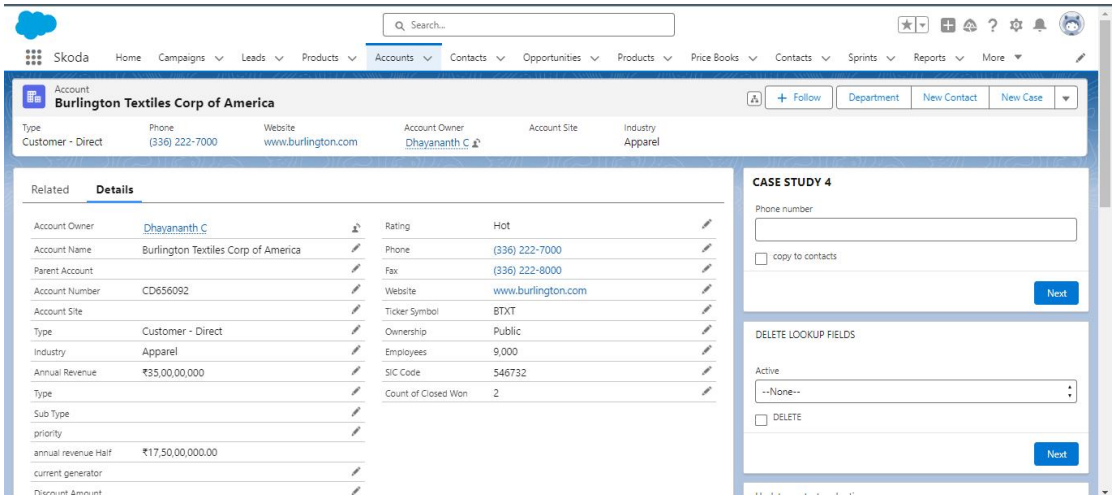


Changing the Textiles stage a closed won



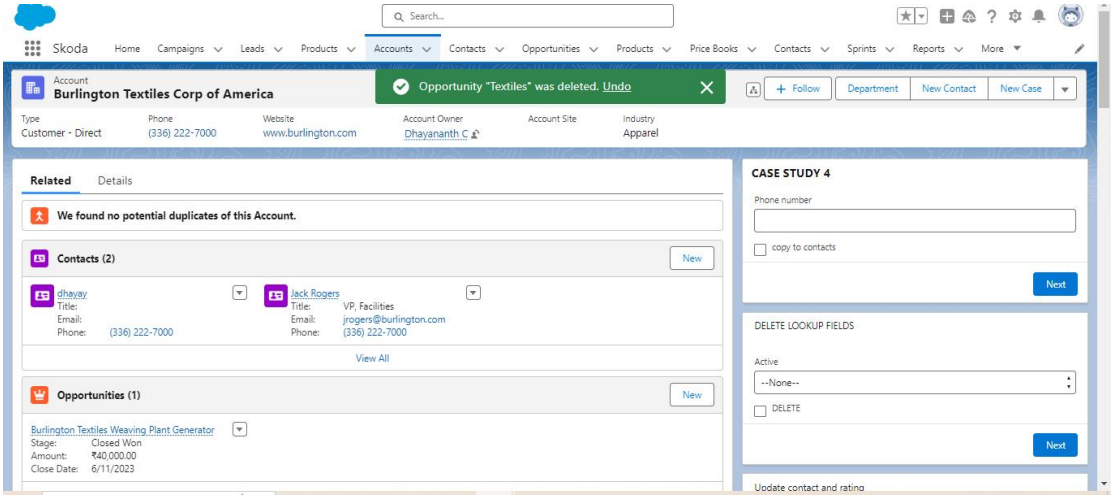
.

The count of closed Won is 2

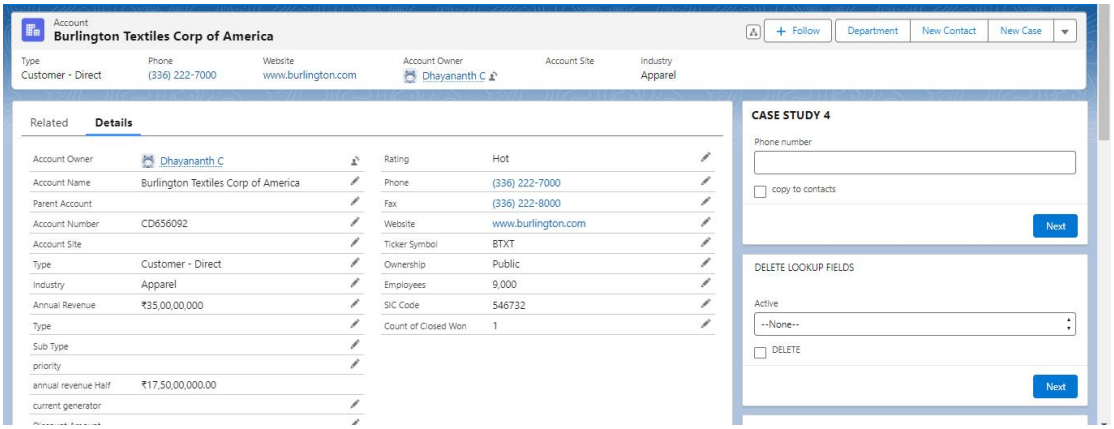


3. Deletion

Delete the Textiles record

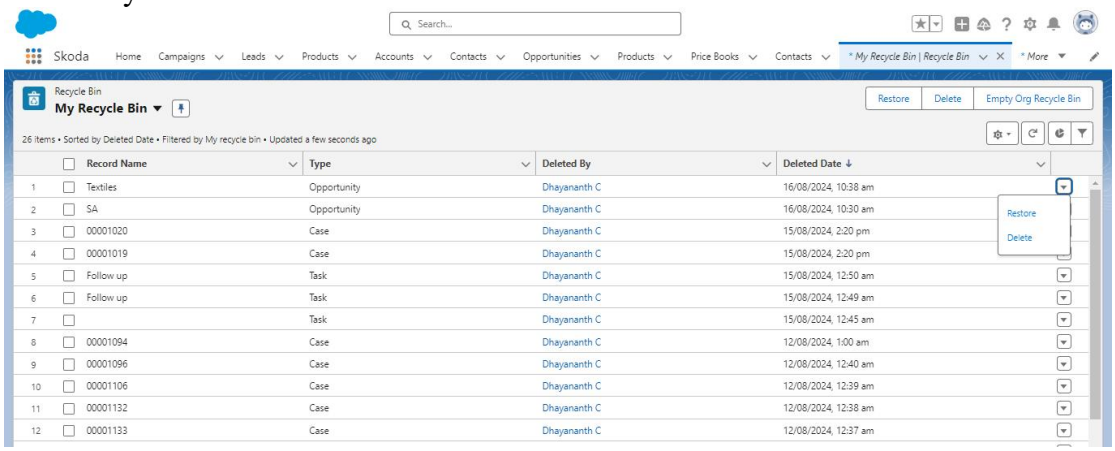


Then the count will 1 because textile is deleted

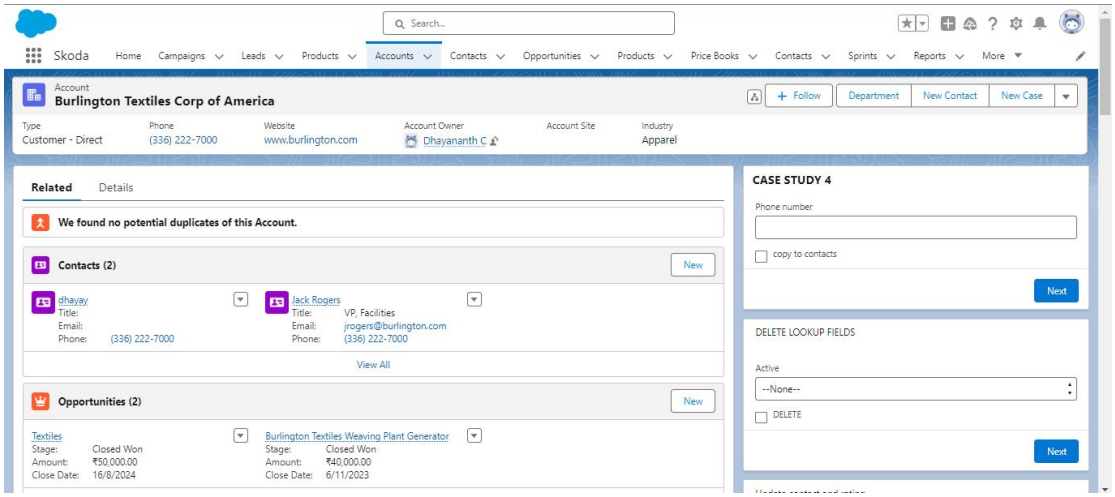


4. Undelete

Go to recycle bin and restore the textile record



Record restored:



The count will be 2