

Use Future Methods

Create an Apex class that uses the `@future` annotation to update Account records.

Create an Apex class with a future method that accepts a List of Account IDs and updates a custom field on the Account object with the number of contacts associated to the Account. Write unit tests that achieve 100% code coverage for the class. Every hands-on challenge in this module asks you to create a test class.

- Create a field on the Account object:
 - Label: `Number Of Contacts`
 - Name: `Number_Of_Contacts`
 - Type: **Number**
 - This field will hold the total number of Contacts for the Account
- Create an Apex class:
 - Name: `AccountProcessor`
 - Method name: `countContacts`
 - The method must accept a List of Account IDs
 - The method must use the `@future` annotation
 - The method counts the number of Contact records associated to each Account ID passed to the method and updates the 'Number_Of_Contacts__c' field with this value

```
public class AccountProcessor {
    @future
    public static void countContacts(Set<Id> setId) {
        List<Account> lstAccount = [Select Id, Number_Of_Contacts__c, (select Id from cont
acts) from Account Where Id IN :setId];

        for (Account acc: lstAccount){
            List<contact> lstCont = acc.contacts;

            acc.Number_Of_Contacts__c = lstCont.size();
        }
    }
}
```

```

        update lstAccount;
    }

}

```

- Create an Apex test class:
 - Name: `AccountProcessorTest`
 - The unit tests must cover all lines of code included in the **AccountProcessor** class, resulting in 100% code coverage.
- Before verifying this challenge, run your test class at least once using the Developer Console Run All feature

```

@isTest
public class AccountProcessorTest {
    public static testmethod void TestAccountProcessorTest(){

        Account a = new Account();
        a.Name = 'Test Account';
        Insert a;

        Contact cont = New Contact();
        cont.FirstName = 'Jane';
        cont.LastName = 'Austin';
        cont.AccountId = a.Id;
        Insert cont;

        set<Id> setAccId = new set<Id>();
        setAccId.add(a.Id);

        Test.startTest();
        AccountProcessor.countContacts(setAccId);
        Test.stopTest();

        Account ACC =[Select Number_Of_Contacts__c from Account where id =:a.Id LIMIT 1];
        System.assertEquals (Integer.valueOf(ACC.Number_Of_Contacts__c) ,1);
    }
}

```