

Apex Testing

1. Get started with Apex Unit Tests

```
@isTest
public class TestVerifyDate {
    @isTest static void Withindays()
    {
        Date startDate = Date.parse('12/14/22');
        Date endDate = Date.parse('12/16/22');
        Date d = VerifyDate.CheckDates(startDate,endDate);
        System.assertEquals(d,endDate);
    }

    @isTest static void NotWithindays()
    {
        Date startDate = Date.parse('12/14/21');
        Date endDate = Date.parse('12/16/22');
        Date d = VerifyDate.CheckDates(startDate,endDate);
        Date d2 = Date.parse('12/31/21');
        System.assertEquals(d,d2);
    }

    @isTest static void Test2()
    {
        Date startDate = Date.parse('12/17/22');
        Date endDate = Date.parse('12/16/22');
        Boolean d = VerifyDate.DateWithin30Days(startDate,endDate);
        System.assertEquals(d, false);
    }

    @isTest static void Test3()
    {
        Date startDate = Date.parse('12/01/22');
        Date endDate = Date.parse('12/24/22');
        Boolean d = VerifyDate.DateWithin30Days(startDate,endDate);
        System.assertEquals(d, True);
    }

    @isTest static void Test4()
    {
        Date startDate = Date.parse('11/01/21');
        Date endDate = Date.parse('12/24/22');
        Boolean d = VerifyDate.DateWithin30Days(startDate,endDate);
        System.assertEquals(d, False);
    }
}
```

```
}
```

2. Test Apex Triggers

```
@isTest
```

```
private class TestRestrictContactByName {  
  
    @isTest static void testInvalidName() {  
  
        Contact myConact = new  
Contact(LastName='INVALIDNAME');  
        insert myConact;  
  
        Test.startTest();  
        Database.SaveResult result = Database.insert(myConact,  
false);  
        Test.stopTest();  
        System.assert(!result.isSuccess());  
        System.assert(result.getErrors().size() > 0);  
        System.assertEquals('Cannot create contact with invalid  
last name.',  
            result.getErrors()[0].getMessage());  
  
    }  
}
```

3. Create test data for Apex Tests

```
public with sharing class RandomContactFactory {  
    public static List<Contact> generateRandomContacts (Integer ConNum, String  
LName){  
        List<Contact> Cons = new List<Contact>();  
  
        for(integer i=0; i<ConNum; i++){  
            Contact C = new Contact(FirstName='TestContact'+i , LastName=LName);  
            Cons.add(c);  
        }  
        Return Cons;  
    }  
}
```