

1. Get Started with Apex Unit Tests

```
public class VerifyDate {

    //method to handle potential checks against two dates
    public static Date CheckDates(Date date1, Date date2) {
        //if date2 is within the next 30 days of date1, use date2. Otherwise use the
        end of the month
        if(DateWithin30Days(date1,date2)) {
            return date2;
        } else {
            return SetEndOfMonthDate(date1);
        }
    }

    //method to check if date2 is within the next 30 days of date1
    private static Boolean DateWithin30Days(Date date1, Date date2) {
        //check for date2 being in the past
        if( date2 < date1) { return false; }

        //check that date2 is within (>=) 30 days of date1
        Date date30Days = date1.addDays(30); //create a date 30 days away from
        date1
        if( date2 >= date30Days ) { return false; }
        else { return true; }
    }

    //method to return the end of the month of a given date
```

```

private static Date SetEndOfMonthDate(Date date1) {
    Integer totalDays = Date.daysInMonth(date1.year(), date1.month());
    Date lastDay = Date.newInstance(date1.year(), date1.month(), totalDays);
    return lastDay;
}
}

```

TestVerifyDate :

```

@Test
public class TestVerifyDate
{
    static testMethod void testMethod1()
    {
        Date d = VerifyDate.CheckDates(System.today(),System.today()+1);
        Date d1 = VerifyDate.CheckDates(System.today(),System.today()+60);
    }
}

```

2. Test Apex Triggers

RestrictContactByName :

```

trigger RestrictContactByName on Contact (before insert, before update) {

    //check contacts prior to insert or update for invalid data
    For (Contact c : Trigger.New) {

```

$$\}$$
$$\}$$

TestRestrictContactByName :

```
private class TestRestrictContactByName {
```

$$\{$$

```
listContact.add(c2);
```

```

        Test.startTest();

        try
        {
            insert listContact;
        }
        catch(Exception ee)
        {

        }

        Test.stopTest();

    }

}

```

3 . Create Test Data for Apex Tests

RandomContactFactory class :

```

//@isTest

public class RandomContactFactory {

    public static List<Contact> generateRandomContacts(Integer
numContactsToGenerate, String FName) {

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

        for(Integer i=0;i<numContactsToGenerate;i++) {

            Contact c = new Contact(FirstName=FName + ' ' + i, LastName =
'Contact '+i);

```

```
        contactList.add(c);  
        System.debug(c);  
    }  
    //insert contactList;  
    System.debug(contactList.size());  
    return contactList;  
}  
  
}
```