Apex Triggers:

Get Started with Apex Triggers

AccountAddressTrigger:

```
trigger AccountAddressTrigger on Account (before insert, before update) {
   for(Account account:Trigger.New){
      if(account.Match_Billing_Address__c == True){
         account.ShippingPostalCode = account.BillingPostalCode;
      }
   }
}
```

Bulk Apex Trigger:

ClosedOpportunityTrigger

```
trigger ClosedOpportunityTrigger on Opportunity (after insert, after update) {
         List<Task> tasklist = new List<Task>();
   for(Opportunity opp: Trigger.New){
      if(opp.StageName == 'Closed Won'){
         tasklist.add(new Task(Subject = 'Follow Up Test Task',WhatId = opp.Id));
      }
   }
   if(tasklist.size()>0){
      insert tasklist;
   }
}
```

Apex testing

Get Started with apex unit test

VerifyDate:

```
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
@isTest
private class TestVerifyDate {

   @isTest static void testCheckDates() {
      Date now = Date.today();
      Date lastOfTheMonth = Date.newInstance(now.year(), now.month(),
Date.daysInMonth(now.year(), now.month()));
      Date plus60 = Date.today().addDays(60);
```

```
                Date d1 = VerifyDate.CheckDates(now, now);
        System.assertEquals(now, d1);

        Date d2 = VerifyDate.CheckDates(now, plus60);
        System.assertEquals(lastOfTheMonth, d2);
    }

}
```

Test Apex Trigger:
RestrictcontactByName:

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

        //check contacts prior to insert or update for invalid data
        For (Contact c : Trigger.New) {
                if(c.LastName == 'INVALIDNAME') {       //invalidname is invalid
                        c.AddError('The Last Name "'+c.LastName+'" is not allowed for
DML');
                }

        }



}
```

TestRestrictContactByName:

```
@isTest
public class TestRestrictContactByName {

    @isTest static void Test_insertupdateContact(){
        Contact cnt = new Contact();
        cnt.LastName = 'INVALIDNAME';

        Test.startTest();
        Database.SaveResult result = Database.insert(cnt, false);
        Test.stopTest();
```

```
        System.assert(!result.isSuccess());
        System.assert(result.getErrors().size() > 0);
        System.assertEquals('The Last Name "INVALIDNAME" is not allowed for DML',
result.getErrors()[0].getMessage());
    }

}
```

RandomContactFactory:

```
public class RandomContactFactory {

    public static List<Contact> generateRandomcontacts(Integer numcnt,String
lastname){
        List<Contact> contacts = new List<Contact>();
        for(Integer i=0;i<numcnt;i++){
            Contact cnt = new Contact(FirstName = 'Test' +i, LastName = lastname);
            Contacts.add(cnt);
        }
        return contacts;
    }
}
```

Asynchronous Apex:

Account Processor:

```
public class AccountProcessor {
    @future
    public static void countContacts(List<Id> accountIds){

        List<Account> accountsToUpdate = new List<Account>();

        List<Account> accounts = [Select Id, Name, (Select Id from Contacts) from Account
Where Id IN :accountIDs];

        For(Account acc:accounts){
```

```
            List<Contact> contactList = acc.Contacts;
            acc.Number_Of_Contacts__c = contactList.size();
            accountsToUpdate.add(acc);

        }
        update accountsToUpdate;
    }

}
```

AccountProcessorTest:

```
@isTest
public class AccountProcessorTest {
    @isTest
    private static void testCountContacts(){
        Account newAccount = new Account(Name='Test Account');
        insert newAccount;

        Contact newContact1 = new Contact(FirstName='John', LastName='Doe', AccountId
= newAccount.Id);
        insert newContact1;

        Contact newContact2 = new Contact(FirstName='Jane', LastName='Doe', AccountId
= newAccount.Id);
        insert newContact2;

        List<Id> accountIds = new List<ID>();
        accountIds.add(newAccount.ID);

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

    }
}
```

LeadProcessor

```
global class LeadProcessor implements Database.Batchable<sObject>{
   global Integer count = 0;

   global Database.QueryLocator start(Database.BatchableContext bc){
      return Database.getQueryLocator('SELECT ID, LeadSource FROM Lead');
   }

   global void execute (Database.BatchableContext bc, List<Lead> L_list){
      List<lead> L_list_new = new List<lead>();

      for(lead L:L_list){
         L.leadsource = 'Dreamforce';
         L_list_new.add(L);
         count += 1;
      }
      update L_list_new;
   }

   global void finish(Database.BatchableContext bc){
      system.debug('count = ' + count);
   }

}
```

LeadProcessorTest

```
@isTest
public class LeadProcessorTest {

   @isTest
   public static void testit(){
      List<lead> L_list = new List<lead>();

      for(Integer i=0; i<200; i++){
         Lead L = new lead();
         L.LastName = 'name + i';
         L.Company = 'Company';
         L.Status = 'Random Status';
```

```
        L_list.add(L);
      }
      insert L_list;

      Test.startTest();
      LeadProcessor lp = new LeadProcessor();
      Id batchId = Database.executeBatch(lp);
      Test.stopTest();
   }
}
```

DailyLeadProcessor:

```
public class DailyLeadProcessor implements Schedulable  {
   Public void execute(SchedulableContext SC){
     List<Lead> LeadObj=[SELECT Id from Lead where LeadSource=null limit 200];
      for(Lead l:LeadObj){
        l.LeadSource='Dreamforce';
        update l;
      }
   }
}
```

DailyLeadProcessorTest:

```
@isTest
private class DailyLeadProcessorTest {
        static testMethod void testDailyLeadProcessor() {
                String CRON_EXP = '0 0 1 * * ?';
                List<Lead> lList = new List<Lead>();
            for (Integer i = 0; i < 200; i++) {
                        lList.add(new Lead(LastName='Dreamforce'+i, Company='Test1
Inc.', Status='Open - Not Contacted'));
                }
                insert lList;

                Test.startTest();
                String jobId = System.schedule('DailyLeadProcessor', CRON_EXP, new
DailyLeadProcessor());
```

```
        }
}
```

Apex Integration service:

AnimalLocator:

```
public class AnimalLocator{
   public static String getAnimalNameById(Integer x){
      Http http = new Http();
      HttpRequest req = new HttpRequest();
      req.setEndpoint('https://th-apex-http-callout.herokuapp.com/animals/' + x);
      req.setMethod('GET');
      Map<String, Object> animal= new Map<String, Object>();
      HttpResponse res = http.send(req);
         if (res.getStatusCode() == 200) {
      Map<String, Object> results = (Map<String,
Object>)JSON.deserializeUntyped(res.getBody());
     animal = (Map<String, Object>) results.get('animal');
      }
return (String)animal.get('name');
   }
}
```

AnimalLocatorMock:

```
@isTest
global class AnimalLocatorMock implements HttpCalloutMock {
    // Implement this interface method
   global HTTPResponse respond(HTTPRequest request) {
      // Create a fake response
      HttpResponse response = new HttpResponse();
      response.setHeader('Content-Type', 'application/json');
      response.setBody('{"animals": ["majestic badger", "fluffy bunny", "scary bear",
"chicken", "mighty moose"]}');
      response.setStatusCode(200);
      return response;
   }
```

```
}
```
AnimalLocatorTest:

```
@isTest
private class AnimalLocatorTest{
   @isTest static void AnimalLocatorMock1() {
      Test.setMock(HttpCalloutMock.class, new AnimalLocatorMock());
      string result = AnimalLocator.getAnimalNameById(3);
      String expectedResult = 'chicken';
      System.assertEquals(result,expectedResult );
   }
}
```

ParkLocator:

```
public class ParkLocator {
   public static string[] country(string theCountry) {
      ParkService.ParksImplPort  parkSvc = new  ParkService.ParksImplPort(); // remove
space
      return parkSvc.byCountry(theCountry);
   }
}
```

ParkLocatorTest:

```
@isTest
private class ParkLocatorTest {
   @isTest static void testCallout() {
      Test.setMock(WebServiceMock.class, new ParkServiceMock ());
      String country = 'United States';
      List<String> result = ParkLocator.country(country);
      List<String> parks = new List<String>{'Yellowstone', 'Mackinac National Park',
'Yosemite'};
       System.assertEquals(parks, result);
   }
}
```

ParkService:

```
//Generated by wsdl2apex
```

```
public class ParkService {
    public class byCountryResponse {
        public String[] return_x;
        private String[] return_x_type_info = new
String[]{'return','http://parks.services/',null,'0','-1','false'};
        private String[] apex_schema_type_info = new
String[]{'http://parks.services/','false','false'};
        private String[] field_order_type_info = new String[]{'return_x'};
    }
    public class byCountry {
        public String arg0;
        private String[] arg0_type_info = new
String[]{'arg0','http://parks.services/',null,'0','1','false'};
        private String[] apex_schema_type_info = new
String[]{'http://parks.services/','false','false'};
        private String[] field_order_type_info = new String[]{'arg0'};
    }
    public class ParksImplPort {
        public String endpoint_x = 'https://th-apex-soap-
service.herokuapp.com/service/parks';
        public Map<String,String> inputHttpHeaders_x;
        public Map<String,String> outputHttpHeaders_x;
        public String clientCertName_x;
        public String clientCert_x;
        public String clientCertPasswd_x;
        public Integer timeout_x;
        private String[] ns_map_type_info = new String[]{'http://parks.services/',
'ParkService'};
        public String[] byCountry(String arg0) {
            ParkService.byCountry request_x = new ParkService.byCountry();
            request_x.arg0 = arg0;
            ParkService.byCountryResponse response_x;
            Map<String, ParkService.byCountryResponse> response_map_x = new
Map<String, ParkService.byCountryResponse>();
            response_map_x.put('response_x', response_x);
            WebServiceCallout.invoke(
```

```
            this,
            request_x,
            response_map_x,
            new String[]{endpoint_x,
            '',
            'http://parks.services/',
            'byCountry',
            'http://parks.services/',
            'byCountryResponse',
            'ParkService.byCountryResponse'}
          );
          response_x = response_map_x.get('response_x');
          return response_x.return_x;
      }
   }
}

ParkServiceMoc:
@isTest
global class ParkServiceMock implements WebServiceMock {
   global void doInvoke(
          Object stub,
          Object request,
          Map<String, Object> response,
          String endpoint,
          String soapAction,
          String requestName,
          String responseNS,
          String responseName,
          String responseType) {
      // start - specify the response you want to send
      ParkService.byCountryResponse response_x = new
ParkService.byCountryResponse();
      response_x.return_x = new List<String>{'Yellowstone', 'Mackinac National Park',
'Yosemite'};
      // end
      response.put('response_x', response_x);
```

```
  }
}
```

AccountManager:

```
@RestResource(urlMapping='/Accounts/*/contacts')
global class AccountManager {
   @HttpGet
   global static Account getAccount() {
      RestRequest req = RestContext.request;
      String accId = req.requestURI.substringBetween('Accounts/', '/contacts');
      Account acc = [SELECT Id, Name, (SELECT Id, Name FROM Contacts)
                  FROM Account WHERE Id = :accId];
      return acc;
   }
}
```

AccountManagerTest:

```
@isTest
private class AccountManagerTest {

   private static testMethod void getAccountTest1() {
      Id recordId = createTestRecord();
      // Set up a test request
      RestRequest request = new RestRequest();
      request.requestUri = 'https://na1.salesforce.com/services/apexrest/Accounts/'+
recordId +'/contacts' ;
      request.httpMethod = 'GET';
      RestContext.request = request;
      // Call the method to test
      Account thisAccount = AccountManager.getAccount();
      // Verify results
      System.assert(thisAccount != null);
      System.assertEquals('Test record', thisAccount.Name);

   }
```

```
    // Helper method
        static Id createTestRecord() {
        // Create test record
        Account TestAcc = new Account(
          Name='Test record');
        insert TestAcc;
        Contact TestCon= new Contact(
        LastName='Test',
        AccountId = TestAcc.id);
        return TestAcc.Id;
    }
}
```

Apex Specialist :

MaintenanceRequestHelper:

```
public with sharing class MaintenanceRequestHelper {
    public static void updateworkOrders(List<Case> updWorkOrders, Map<Id,Case>
nonUpdCaseMap) {
        Set<Id> validIds = new Set<Id>();


        For (Case c : updWorkOrders){
            if (nonUpdCaseMap.get(c.Id).Status != 'Closed' && c.Status == 'Closed'){
                if (c.Type == 'Repair' || c.Type == 'Routine Maintenance'){
                    validIds.add(c.Id);



                }
            }
        }

        if (!validIds.isEmpty()){
            List<Case> newCases = new List<Case>();
            Map<Id,Case> closedCasesM = new Map<Id,Case>([SELECT Id, Vehicle__c,
Equipment__c, Equipment__r.Maintenance_Cycle__c,(SELECT
Id,Equipment__c,Quantity__c FROM Equipment_Maintenance_Items__r)
```

```
                                        FROM Case WHERE Id IN :validIds]);
        Map<Id,Decimal> maintenanceCycles = new Map<ID,Decimal>();
        AggregateResult[] results = [SELECT Maintenance_Request__c,
MIN(Equipment__r.Maintenance_Cycle__c)cycle FROM
Equipment_Maintenance_Item__c WHERE Maintenance_Request__c IN :ValidIds GROUP
BY Maintenance_Request__c];

      for (AggregateResult ar : results){
        maintenanceCycles.put((Id) ar.get('Maintenance_Request__c'), (Decimal)
ar.get('cycle'));
      }

        for(Case cc : closedCasesM.values()){
          Case nc = new Case (
            ParentId = cc.Id,
          Status = 'New',
            Subject = 'Routine Maintenance',
            Type = 'Routine Maintenance',
            Vehicle__c = cc.Vehicle__c,
            Equipment__c =cc.Equipment__c,
            Origin = 'Web',
            Date_Reported__c = Date.Today()

          );

          If (maintenanceCycles.containskey(cc.Id)){
            nc.Date_Due__c = Date.today().addDays((Integer)
maintenanceCycles.get(cc.Id));
          }

          newCases.add(nc);
        }

        insert newCases;

        List<Equipment_Maintenance_Item__c> clonedWPs = new
List<Equipment_Maintenance_Item__c>();
```

```
        for (Case nc : newCases){
            for (Equipment_Maintenance_Item__c wp :
closedCasesM.get(nc.ParentId).Equipment_Maintenance_Items__r){
                Equipment_Maintenance_Item__c wpClone = wp.clone();
                wpClone.Maintenance_Request__c = nc.Id;
                ClonedWPs.add(wpClone);

            }
        }
        insert ClonedWPs;
    }
  }
}
```

MaintenanceRequestHelperTest:

```
@istest
public with sharing class MaintenanceRequestHelperTest {

  private static final string STATUS_NEW = 'New';
  private static final string WORKING = 'Working';
  private static final string CLOSED = 'Closed';
  private static final string REPAIR = 'Repair';
  private static final string REQUEST_ORIGIN = 'Web';
  private static final string REQUEST_TYPE = 'Routine Maintenance';
  private static final string REQUEST_SUBJECT = 'Testing subject';

  PRIVATE STATIC Vehicle__c createVehicle(){
    Vehicle__c Vehicle = new Vehicle__C(name = 'SuperTruck');
    return Vehicle;
  }

  PRIVATE STATIC Product2 createEq(){
    product2 equipment = new product2(name = 'SuperEquipment',
                      lifespan_months__C = 10,
                      maintenance_cycle__C = 10,
                      replacement_part__c = true);
    return equipment;
  }
```

```
    PRIVATE STATIC Case createMaintenanceRequest(id vehicleId, id equipmentId){
        case cs = new case(Type=REPAIR,
                           Status=STATUS_NEW,
                           Origin=REQUEST_ORIGIN,
                           Subject=REQUEST_SUBJECT,
                           Equipment__c=equipmentId,
                           Vehicle__c=vehicleId);
        return cs;
    }

    PRIVATE STATIC Equipment_Maintenance_Item__c createWorkPart(id equipmentId,id
requestId){
        Equipment_Maintenance_Item__c wp = new
Equipment_Maintenance_Item__c(Equipment__c = equipmentId,
                                                    Maintenance_Request__c = requestId);
        return wp;
    }

    @istest
    private static void testMaintenanceRequestPositive(){
        Vehicle__c vehicle = createVehicle();
        insert vehicle;
        id vehicleId = vehicle.Id;

        Product2 equipment = createEq();
        insert equipment;
        id equipmentId = equipment.Id;

        case somethingToUpdate = createMaintenanceRequest(vehicleId,equipmentId);
        insert somethingToUpdate;

        Equipment_Maintenance_Item__c workP =
createWorkPart(equipmentId,somethingToUpdate.id);
        insert workP;

        test.startTest();
```

```
        somethingToUpdate.status = CLOSED;
        update somethingToUpdate;
        test.stopTest();

        Case newReq = [Select id, subject, type, Equipment__c, Date_Reported__c,
Vehicle__c, Date_Due__c
                    from case
                    where status =:STATUS_NEW];

        Equipment_Maintenance_Item__c workPart = [select id
                                    from Equipment_Maintenance_Item__c
                                    where Maintenance_Request__c =:newReq.Id];

        system.assert(workPart != null);
        system.assert(newReq.Subject != null);
        system.assertEquals(newReq.Type, REQUEST_TYPE);
        SYSTEM.assertEquals(newReq.Equipment__c, equipmentId);
        SYSTEM.assertEquals(newReq.Vehicle__c, vehicleId);
        SYSTEM.assertEquals(newReq.Date_Reported__c, system.today());
    }

    @istest
    private static void testMaintenanceRequestNegative(){
        Vehicle__C vehicle = createVehicle();
        insert vehicle;
        id vehicleId = vehicle.Id;

        product2 equipment = createEq();
        insert equipment;
        id equipmentId = equipment.Id;

        case emptyReq = createMaintenanceRequest(vehicleId,equipmentId);
        insert emptyReq;

        Equipment_Maintenance_Item__c workP = createWorkPart(equipmentId,
emptyReq.Id);
        insert workP;
```

```
        test.startTest();
        emptyReq.Status = WORKING;
        update emptyReq;
        test.stopTest();

        list<case> allRequest = [select id
                                 from case];

        Equipment_Maintenance_Item__c workPart = [select id
                                                  from Equipment_Maintenance_Item__c
                                                  where Maintenance_Request__c = :emptyReq.Id];

        system.assert(workPart != null);
        system.assert(allRequest.size() == 1);
    }

    @istest
    private static void testMaintenanceRequestBulk(){
        list<Vehicle__C> vehicleList = new list<Vehicle__C>();
        list<Product2> equipmentList = new list<Product2>();
        list<Equipment_Maintenance_Item__c> workPartList = new
list<Equipment_Maintenance_Item__c>();
        list<case> requestList = new list<case>();
        list<id> oldRequestIds = new list<id>();

        for(integer i = 0; i < 300; i++){
          vehicleList.add(createVehicle());
           equipmentList.add(createEq());
        }
        insert vehicleList;
        insert equipmentList;

        for(integer i = 0; i < 300; i++){
           requestList.add(createMaintenanceRequest(vehicleList.get(i).id,
equipmentList.get(i).id));
        }
```

```
        insert requestList;

        for(integer i = 0; i < 300; i++){
            workPartList.add(createWorkPart(equipmentList.get(i).id, requestList.get(i).id));
        }
        insert workPartList;

        test.startTest();
        for(case req : requestList){
            req.Status = CLOSED;
            oldRequestIds.add(req.Id);
        }
        update requestList;
        test.stopTest();

        list<case> allRequests = [select id
                                  from case
                                  where status =: STATUS_NEW];

        list<Equipment_Maintenance_Item__c> workParts = [select id
                                                         from Equipment_Maintenance_Item__c
                                                         where Maintenance_Request__c in: oldRequestIds];

        system.assert(allRequests.size() == 300);
    }
}

trigger MaintenanceRequest on Case (before update, after update) {

    if(Trigger.isUpdate && Trigger.isAfter){

        MaintenanceRequestHelper.updateWorkOrders(Trigger.New, Trigger.OldMap);

    }

}
```

WarehouseCalloutService:

```
public with sharing class WarehouseCalloutService {
        private static final String WAREHOUSE_URL = 'https://th-superbadge-
apex.herokuapp.com/equipment';

    //@future(callout=true)
    public static void runWarehouseEquipmentSync(){

        Http http = new Http();
        HttpRequest request = new HttpRequest();

        request.setEndpoint(WAREHOUSE_URL);
        request.setMethod('GET');
        HttpResponse response = http.send(request);



        List<Product2> warehouseEq = new List<Product2>();

        if (response.getStatusCode() == 200){
            List<Object> jsonResponse =
(List<Object>)JSON.deserializeUntyped(response.getBody());
            System.debug(response.getBody());

            for (Object eq : jsonResponse){
                Map<String,Object> mapJson = (Map<String,Object>)eq;
                Product2 myEq = new Product2();
                myEq.Replacement_Part__c = (Boolean) mapJson.get('replacement');
                myEq.Name = (String) mapJson.get('name');
                myEq.Maintenance_Cycle__c = (Integer) mapJson.get('maintenanceperiod');
                myEq.Lifespan_Months__c = (Integer) mapJson.get('lifespan');
                myEq.Cost__c = (Decimal) mapJson.get('lifespan');
                myEq.Warehouse_SKU__c = (String) mapJson.get('sku');
                myEq.Current_Inventory__c = (Double) mapJson.get('quantity');
                warehouseEq.add(myEq);
            }

            if (warehouseEq.size() > 0){
```

```
            upsert warehouseEq;
            System.debug('Your equipment was synced with the warehouse one');
            System.debug(warehouseEq);
          }

      }
    }
}
```

WarehouseCalloutServiceMock :

```
@isTest
global class WarehouseCalloutServiceMock implements HttpCalloutMock {
    // implement http mock callout
    global static HttpResponse respond(HttpRequest request){

        System.assertEquals('https://th-superbadge-apex.herokuapp.com/equipment',
request.getEndpoint());
        System.assertEquals('GET', request.getMethod());

        // Create a fake response
        HttpResponse response = new HttpResponse();
        response.setHeader('Content-Type', 'application/json');

response.setBody('[{"_id":"55d66226726b611100aaf741","replacement":false,"quantity":5
,"name":"Generator 1000
kW","maintenanceperiod":365,"lifespan":120,"cost":5000,"sku":"100003"}]');
        response.setStatusCode(200);
        return response;
    }
}
```

WarehouseCalloutServiceTest:

```
@isTest
          private class WarehouseCalloutServiceTest {
    @isTest
    static void testWareHouseCallout(){
        Test.startTest();
        // implement mock callout test here
```

```
        Test.setMock(HTTPCalloutMock.class, new WarehouseCalloutServiceMock());
        WarehouseCalloutService.runWarehouseEquipmentSync();
        Test.stopTest();
        System.assertEquals(1, [SELECT count() FROM Product2]);
    }
}

WarehouseSyncSchedule:
global with sharing class WarehouseSyncSchedule implements Schedulable{
    global void execute(SchedulableContext ctx){
        System.enqueueJob(new WarehouseCalloutService());
    }
}

WarehouseSyncScheduleTest :
@isTest
public class WarehouseSyncScheduleTest {

    @isTest static void WarehousescheduleTest(){
        String scheduleTime = '00 00 01 * * ?';
        Test.startTest();
        Test.setMock(HttpCalloutMock.class, new WarehouseCalloutServiceMock());
        String jobID=System.schedule('Warehouse Time To Schedule to Test',
scheduleTime, new WarehouseSyncSchedule());
        Test.stopTest();
        //Contains schedule information for a scheduled job. CronTrigger is similar to a
cron job on UNIX systems.
        // This object is available in API version 17.0 and later.
        CronTrigger a=[SELECT Id FROM CronTrigger where NextFireTime > today];
        System.assertEquals(jobID, a.Id,'Schedule ');
    }
}
```