APEX SPECIALIST SUPER BADGE CODES

```
APEX TRIGGERS
AccountAddressTrigger.axpt: trigger AccountAddressTrigger on Account (before
insert, before update) {
for(Account account:Trigger.New){
if(account.Match_Billing_Address__c == True){
account.ShippingPostalCode = account.BillingPostalCode;
}
}
ClosedOpportunityTrigger.axpt:
trigger ClosedOpportunityTrigger on Opportunity (after insert,after update) {
List tasklist = new List();
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 VerifyData.apxc:
public class VerifyDate {
public static Date CheckDates(Date date1, Date date2) {
if(DateWithin30Days(date1,date2)) {
return date2;
else { return SetEndOfMonthDate(date1);
}
@TestVisible 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
@TestVisible 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;
}
TestVerifyData.apxc:
@isTest
private class TestVerifyDate {
@isTest static void Test_CheckDates_case1(){
Date D = VerifyDate.CheckDates(date.parse('01/01/2022'),date.parse('01/05/
System.assertEquals(date.parse('01/05/2022'), D);
}
@isTest static void Test_CheckDates_case2(){
Date D = VerifyDate.CheckDates(date.parse('01/01/2022'), date.parse('05/05/2022'));
System.assertEquals(date.parse('01/31/2022'), D);
@isTest static void Test_Within30Days_case1(){
Boolean flag = VerifyDate.DateWithin30Days(date.parse('01/01/2022'),
date.parse('12/30/2021'));
System.assertEquals(false, flag);
@isTest static void Test_Within30Days_case2()
Boolean flag = VerifyDate.DateWithin30Days(date.parse('01/01/2022'),
```

```
date.parse('02/02/2021'));
System.assertEquals(false, flag);
@isTest static void Test_Within30Days_case3()
Boolean flag = VerifyDate.DateWithin30Days(date.parse('01/01/2022'),
date.parse('01/15/2022'));
System.assertEquals(true, flag);
}
@isTest static void Test_SetEndOfMonthDate(){
Date returndate = VerifyDate.SetEndOfMonthDate(date.parse('01/01/2022'));
}
}
RestrictContactByName.apxt: 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
}
}
TestRestrictContactByName.apxc:
@isTest private 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
result.getErrors()[0].getMessage());
}
```

```
}
 RandomContactFactory.apxc: public class RandomContactFactory {
public static List generateRandomContacts(Integer num_cnts, string lastname) {
List contacts = new List();
for(Integer i = 0; i < num_cnts; i++) {
Contact cnt = new Contact(FirstName = 'Test' +i,LastName = SPSGP-12153-Salesforce
Developer Catalyst Self-Learning & Super Badges 5 lastname);
contacts.add(cnt);
}
return contacts;
}
ASYNCHRONOUS APEX AccountProcessor.apxc: public class AccountProcessor {
@future
public static void countContacts(List accountId_lst) {
Map account_cno = new Map();
List account_lst_all = new List([select id, (select id from contacts) from account]);
for(account a:account_lst_all)
{
account_cno.put(a.id,a.contacts.size());
//populate the map
}
List account_lst = new List();
// list of account that we will upsert
for(Id accountId : accountId_lst) {
if(account_cno.containsKey(accountId))
 account acc = new account();
   acc.ld = accountld;
 acc.Number_of_Contacts__c = account_cno.get(accountId);
account_lst.add(acc);
 }
upsert account_lst;
}
```

```
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 6
}
AccountProcessorTest.apxc:
@isTest public class AccountProcessorTest { @isTest
                                                          public static void testFunc()
account acc = new account();
acc.name = 'MATW INC';
                contact con = new contact();
 insert acc;
con.lastname = 'Mann1';
 con.AccountId = acc.Id;
 insert con;
contact con1 = new contact();
con1.lastname = 'Mann2';
con1.AccountId = acc.Id:
 insert con1;
 List acc_list = new List();
  acc_list.add(acc.ld);
Test.startTest();
AccountProcessor.countContacts(acc_list);
  Test.stopTest();
 List acc1 = new List([select Number_of_Contacts_c from account where id = :acc.id]);
system.assertEquals(2,acc1[0].Number_of_Contacts__c);
}
LeadProcessor.apxc: SPSGP-12153-Salesforce Developer Catalyst Self-Learning &
Super Badges 7 global class LeadProcessor implements Database.Batchable {
 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 I_lst) {
  List I_lst_new = new List();
 for(lead I : I_lst) {
   I.leadsource = 'Dreamforce';
      l_lst_new.add(l);
```

```
count+=1;
  update l_lst_new;
 global void finish (Database.BatchableContext bc) {
   system.debug('count = '+count);
 }
}
LeadProcessorTest.apxc:
@isTest public class LeadProcessorTest {
 @isTest
 public static void testit() {
  List I_lst = new List();
  for (Integer i = 0; i < 200; i++) {
   Lead I = new lead();
  I.LastName = 'name'+i;
   l.company = 'company';
     I.Status = 'somestatus';
   l_lst.add(l);
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 8
  }
insert I_lst;
 test.startTest();
  Leadprocessor lp = new Leadprocessor();
  Id batchId = Database.executeBatch(Ip);
Test.stopTest();
 }
}
AddPrimaryContact.apxc: public class AddPrimaryContact implements Queueable {
public contact c;
public String state;
public AddPrimaryContact(Contact c, String state) {
 this.c = c;
  this.state = state;
 }
```

```
public void execute(QueueableContext qc) {
system.debug('this.c = '+this.c+' this.state = '+this.state);
  List acc_lst = new List([select id, name, BillingState from account where
account.BillingState = :this.state limit 200]);
  List c_lst = new List();
 for(account a: acc_lst) {
     contact c = new contact();
  c = this.c.clone(false, false, false, false);
     c.AccountId = a.ld;
    c_lst.add(c);
 }
 insert c_lst; SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges
9
}
AddPrimaryContactTest.apxc:
@IsTest public class AddPrimaryContactTest {
 @IsTest public static void testing() {
  List acc_lst = new List();
 for (Integer i=0; i<50;i++) {
     account a = new account(name=string.valueOf(i),billingstate='NY');
system.debug('account a = '+a);
  acc_lst.add(a);
   }
for (Integer i=0; i<50;i++) {
     account a = new account(name=string.valueOf(50+i),billingstate='CA');
system.debug('account a = '+a);
  acc_lst.add(a);
  insert acc_lst;
   Test.startTest();
contact c = new contact(lastname='alex');
  AddPrimaryContact apc = new AddPrimaryContact(c,'CA');
 system.debug('apc = '+apc);
 System.enqueueJob(apc);
```

```
Test.stopTest();
 List c_lst = new List([select id from contact]);
  Integer size = c_lst.size();
 system.assertEquals(50, size);
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 10
DailyLeadProcessor.apxc:
public class DailyLeadProcessor implements schedulable{
public void execute(schedulableContext sc) {
 List I_lst_new = new List();
  List I_lst = new List([select id, leadsource from lead where leadsource = null]);
for(lead I : I_lst) {
 I.leadsource = 'Dreamforce';
   l_lst_new.add(l);
  }
 update l_lst_new;
}
DailyLeadProcessorTest.apxc:
@isTest public class DailyLeadProcessorTest {
 @isTest public static void testing() {
  List I_lst = new List();
 for(Integer i=0;i<200;i++) {
      lead I = new lead();
 I.lastname = 'lastname'+i;
  I.Company = 'company'+i;
    I_lst.add(l);
 }
  insert l_lst;
 Test.startTest();
   DailyLeadProcessor dlp = new DailyLeadProcessor ();
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 11
String jobId = System.Schedule('dailyleadprocessing','0 0 0 1 12 ? 2016',dlp);
Test.stopTest();
```

```
List I_lst_chk = new List([select id,leadsource from lead where leadsource !=
'Dreamforce']);
 System.assertequals(0,l_lst_chk.size());
}
}
APEX INTEGRATION SERVICES AnimalLocator.apxc: public class AnimalLocator {
public class cls_animal {
public Integer id;
public String name;
public String eats; public String says;
}
 public class JSONOutput{
public cls_animal animal;
//public JSONOutput parse(String json){
//return (JSONOutput) System.JSON.deserialize(json, JSONOutput.class);
/\!/
}
}
  public static String getAnimalNameById (Integer id) {
 Http http = new Http();
  HttpRequest request = new HttpRequest();
 request.setEndpoint('https://th-apex-httpcallout.herokuapp.com/animals/' + id);
//request.setHeader('id', String.valueof(id)); -- cannot be used in this SPSGP-12153-
Salesforce Developer Catalyst Self-Learning & Super Badges 12 challenge:)
request.setMethod('GET');
  HttpResponse response = http.send(request);
 system.debug('response: ' + response.getBody());
 //Map map_results = (Map) JSON.deserializeUntyped(response.getBody());
jsonOutput results = (jsonOutput) JSON.deserialize(response.getBody(),
jsonOutput.class);
 //Object results = (Object) map_results.get('animal'); system.debug('results= ' +
results.animal.name);
 return(results.animal.name);
}
```

```
AnimalLocatorMock.apxc:
@IsTest global class AnimalLocatorMock implements HttpCalloutMock {
 global HTTPresponse respond(HTTPrequest request) {
Httpresponse response = new Httpresponse();
   response.setStatusCode(200);
  //-- directly output the JSON, instead of creating a logic
//response.setHeader('key, value)
 //Integer id = Integer.valueof(request.getHeader('id'));
 //Integer id = 1;
                      //List lst_body = new List {'majestic badger', 'fluffy bunny'};
//system.debug('animal return value: ' + lst_body[id]);
response.setBody('{"animal":{"id":1,"name":"chicken","eats":"chicken food","says":"cluck
cluck"}}');
 return response;
}
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 13
AnimalLocatorTest.apxc:
@IsTest public class AnimalLocatorTest {
 @isTest
 public static void testAnimalLocator() {
 Test.setMock(HttpCalloutMock.class, new AnimalLocatorMock());
  //Httpresponse response = AnimalLocator.getAnimalNameByld(1);
 String s = AnimalLocator.getAnimalNameById(1);
 system.debug('string returned: ' + s);
  }
}
ParkService.apxc:
//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 { SPSGP-12153-Salesforce Developer Catalyst Self-Learning
& Super Badges 14
                        public String endpoint_x = 'https://th-apex-
soapservice.herokuapp.com/service/parks';
public Map inputHttpHeaders_x;
  public Map 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 response_map_x = new Map();
  response_map_x.put('response_x', response_x);
     WebServiceCallout.invoke(
                                         this,
                                                     request_x,
                          new String[]{endpoint_x,
response_map_x,
                                                   'http://parks.services/',
'http://parks.services/',
                               'byCountry',
                             'ParkService.byCountryResponse'}
'byCountryResponse',
                                                                        );
response_x = response_map_x.get('response_x');
     return response_x.return_x;
  }
}
```

```
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 15
ParkLocator.apxc: public class ParkLocator {
public static String[] country(String country){
ParkService.ParksImplPort parks = new ParkService.ParksImplPort();
 String[] parksname = parks.byCountry(country);
 return parksname;
 }
ParkLocatorTest.apxc:
@isTest private class ParkLocatorTest{
 @isTest static void testParkLocator() {
   Test.setMock(WebServiceMock.class, new ParkServiceMock());
  String[] arrayOfParks = ParkLocator.country('India');
  System.assertEquals('Park1', arrayOfParks[0]);
}
ParkServiceMock.apxc:
@isTest global class ParkServiceMock implements WebServiceMock {
 global void doInvoke(
                            Object stub,
                                               Object request,
                                                                    Map response,
                                              String requestName, SPSGP-12153-
String endpoint,
                     String soapAction,
Salesforce Developer Catalyst Self-Learning & Super Badges 16
                                                                    String
                  String responseName,
                                              String responseType) {
responseNS,
ParkService.byCountryResponse response_x = new ParkService.byCountryResponse();
List lstOfDummyParks = new List {'Park1','Park2','Park3'};
  response_x.return_x = lstOfDummyParks;
  response.put('response_x', response_x);
}
AccountManager.apxc: @RestResource(urlMapping='/Accounts/*/contacts') global
with sharing class AccountManager {
 @HttpGet global static account getAccount() {
   RestRequest request = RestContext.request;
                                                  String accountId =
request.requestURI.substring(request.requestURI.lastIndexOf('/')-18,
request.requestURI.lastIndexOf('/'));
  List a = [select id, name, (select id, name from contacts) from account where id =
```

```
:accountId];
  List co = [select id, name from contact where account.id = :accountId];
system.debug('** a[0]= '+ a[0]);
                                 return a[0];
}
}
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 17
AccountManagerTest.apxc:
@lstest(SeeAllData=true)
public class AccountManagerTest {
 @lsTest public static void testaccountmanager() {
    RestRequest request = new RestRequest();
                                                 request.requestUri =
'https://mannharleen-
deved.my.salesforce.com/services/apexrest/Accounts/00190000016cw4tAAA/c
ontacts':
  request.httpMethod = 'GET';
 RestContext.request = request;
system.debug('test account result = '+ AccountManager.getAccount());
  }
}
APEX SPECIALIST SUPER BADGE Challenge 1 MaintenanceRequestHelper.apxc: public
with sharing class MaintenanceRequestHelper {
public static void updateWorkOrders(List caseList) {
List newCases = new List();
Map result=getDueDate(caseList);
for(Case c : caseList){
if(c.status=='closed') if(c.type=='Repair' || c.type=='Routine Maintenance'){
Case newCase = new Case();
newCase.Status='New';
newCase.Origin='web';
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 18
newCase.Type='Routine Maintenance';
newCase.Subject='Routine Maintenance of Vehicle';
newCase.Vehicle__c;
newCase.Equipment_c=c.Equipment_c;
newCase.Date_Reported__c=Date.today();
```

```
if(result.get(c.Id)!=null) newCase.Date_Due__c=Date.today()+result.get(c.Id);
else newCase.Date_Due__c=Date.today();
newCases.add(newCase);
}
}
insert newCases;
// public static Map getDueDate(List CaseIDs){
Map result = new Map();
Map caseKeys = new Map (CaseIDs);
List wpc=[select Maintenance_Request__r.ID
cID,min(Equipment_r.Maintenance_Cycle_c)cycle from Work_Part_c where
Maintenance_Request__r.ID in :caseKeys.keySet() group by
Maintenance_Request__r.ID ];
for(AggregateResult res :wpc){
Integer addDays=0;
if(res.get('cycle')!=null) addDays+=Integer.valueOf(res.get('cycle'));
result.put((String)res.get('cID'),addDays);
}
return result;
MaintenanceRequest.apxt:
trigger MaintenanceRequest on Case (before update, after update) {
// ToDo: Call MaintenanceRequestHelper.updateWorkOrders SPSGP-12153-Salesforce
Developer Catalyst Self-Learning & Super Badges 19 if(Trigger.isAfter)
MaintenanceRequestHelper.updateWorkOrders(Trigger.New);
}
Challenge 2: WarehouseCalloutService.apxt: public with sharing class
WarehouseCalloutService {
private static final String WAREHOUSE_URL = 'https://th-
superbadgeapex.herokuapp.com/equipment';
@future(callout=true) public static void runWarehouseEquipmentSync() {
//ToDo: complete this method to make the callout (using @future) to the
    REST endpoint and update equipment on hand. HttpResponse response =
```

```
getResponse();
if(response.getStatusCode() == 200) {
List results = getProductList(response);
//get list of products from Http callout response if(results.size() >0) upsert results
Warehouse_SKU__c;
//Upsert the products in your org based on the external ID SKU
}
}
//Get the product list from the external link public static List
getProductList(HttpResponse response) {
List externalProducts = (List) JSON.deserializeUntyped(response.getBody());
//desrialize the ison response List newProducts = new List();
for(Object p : externalProducts) {
Map productMap = (Map) p;
Product2 pr = new Product2();
//Map the fields in the response to the appropriate fields in the Equipment object
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 20
pr.Replacement_Part__c = (Boolean)productMap.get('replacement');
pr.Cost_c = (Integer)productMap.get('cost'); pr.Current_Inventory_c =
(Integer)productMap.get('quantity');
pr.Lifespan_Months__c = (Integer)productMap.get('lifespan');
pr.Maintenance_Cycle__c = (Integer)productMap.get('maintenanceperiod');
pr.Warehouse_SKU__c = (String)productMap.get('sku'); pr.ProductCode =
(String)productMap.get('_id');
pr.Name = (String)productMap.get('name');
newProducts.add(pr);
return newProducts;
// Send Http GET request and receive Http response public static HttpResponse
getResponse()
Http http = new Http();
HttpRequest request = new HttpRequest();
request.setEndpoint(WAREHOUSE_URL);
```

```
request.setMethod('GET');
HttpResponse response = http.send(request);
return response;
}
}
Challenge 3: WarehouseSyncSchedule.apxt global class WarehouseSyncSchedule
implements Schedulable{
// implement scheduled code here global void execute (SchedulableContext sc){
WarehouseCalloutService.runWarehouseEquipmentSync();
//optional this can be done by debug mode String sch = '00 00 01 * * ?';//on 1 pm
System.schedule('WarehouseSyncScheduleTest', sch, new WarehouseSyncSchedule());
}
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 21
}
Challenge 4: MaintenanceRequest.apxt: trigger MaintenanceRequest on Case (before
update, after update) {
if(Trigger.isUpdate && Trigger.isAfter)
MaintenanceRequestHelper.updateWorkOrders(Trigger.New);
}
InstallationTests.apxt:
@IsTest private class InstallationTests {
private static final String STRING_TEST = 'TEST';
private static final String NEW_STATUS = '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
= 'AMC Spirit'; public static String CRON_EXP = '0 0 1 * * ?'; static testmethod void
testMaintenanceRequestNegative() {
Vehicle__c vehicle = createVehicle();
insert vehicle;
Id vehicleId = vehicle.Id;
Product2 equipment = createEquipment();
insert equipment;
Id equipmentId = equipment.Id;
Case r = createMaintenanceRequest(vehicleId, equipmentId);
```

```
insert r;
Work_Part__c w = createWorkPart(equipmentId, r.Id);
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 22 insert w;
Test.startTest();
r.Status = WORKING; update r;
Test.stopTest();
List allRequest = [SELECT Id FROM Case];
Work_Part_c workPart = [SELECT Id FROM Work_Part_c WHERE
Maintenance_Request__c =: r.ld];
System.assert(workPart != null);
System.assert(allRequest.size() == 1);
}
static testmethod void testWarehouseSync() {
Test.setMock(HttpCalloutMock.class, new WarehouseCalloutServiceMock());
Test.startTest();
String jobId = System.schedule('WarehouseSyncSchedule', CRON_EXP, new
WarehouseSyncSchedule());
CronTrigger ct = [SELECT Id, CronExpression, TimesTriggered, NextFireTime FROM
CronTrigger WHERE id = :jobId];
System.assertEquals(CRON_EXP, ct.CronExpression); System.assertEquals(0,
ct.TimesTriggered);
Test.stopTest();
}
private static Vehicle__c createVehicle() {
Vehicle__c v = new Vehicle__c(Name = STRING_TEST);
return v;
}
private static Product2 createEquipment() {
Product2 p = new Product2(Name = STRING_TEST, Lifespan_Months__c = 10,
Maintenance_Cycle__c = 10, SPSGP-12153-Salesforce Developer Catalyst Self-Learning
& Super Badges 23 Replacement_Part__c = true);
return p;
}
private static Case createMaintenanceRequest(Id vehicleId, Id equipmentId) {
Case c = new Case(Type = REPAIR, Status = NEW_STATUS, Origin = REQUEST_ORIGIN,
```

```
Subject = REQUEST_SUBJECT, Equipment_c = equipmentId, Vehicle_c = vehicleId);
return c;
}
private static Work_Part__c createWorkPart(Id equipmentId, Id requestId) {
Work_Part_c wp = new Work_Part_c(Equipment_c = equipmentId,
Maintenance_Request__c = requestId); return wp;
}
MaintenanceRequestHelper.apxt: public with sharing class MaintenanceRequestHelper
public static void updateWorkOrders(List caseList) {
List newCases = new List();
Map result=getDueDate(caseList);
for(Case c : caseList){
if(c.status=='closed') if(c.type=='Repair' || c.type=='Routine Maintenance'){
Case newCase = new Case();
newCase.Status='New';
newCase.Origin='web';
newCase.Type='Routine Maintenance';
newCase.Subject='Routine Maintenance of Vehicle';
newCase.Vehicle__c=c.Vehicle__c;
newCase.Equipment__c=c.Equipment__c;
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 24
newCase.Date_Reported__c=Date.today();
if(result.get(c.Id)!=null) newCase.Date_Due__c=Date.today()+result.get(c.Id);
else newCase.Date_Due__c=Date.today();
newCases.add(newCase);
}
insert newCases;
}
// public static Map getDueDate(List CaseIDs){
Map result = new Map();
Map caseKeys = new Map (CaseIDs);
List wpc=[select Maintenance_Request__r.ID
```

```
cID,min(Equipment__r.Maintenance_Cycle__c)cycle from Work_Part__c where
Maintenance_Request__r.ID in :caseKeys.keySet() group by
Maintenance_Request__r.ID ];
for(AggregateResult res :wpc){
Integer addDays=0;
if(res.get('cycle')!=null) addDays+=Integer.valueOf(res.get('cycle'));
result.put((String)res.get('cID'),addDays); } return result;
}
}
MaintenanceRequestTest.apxt:
@isTest public class MaintenanceRequestTest {
static List caseList1 = new List();
static List prodList = new List();
SPSGP-12153-Salesforce Developer Catalyst Self-Learning & Super Badges 25 static
List wpList = new List();
@testSetup static void getData(){
caseList1 = CreateData(300,3,3,'Repair');
}
public static List CreateData(Integer numOfcase, Integer numofProd, Integer
numofVehicle, String type){
List caseList = new List();
//Create Vehicle Vehicle_c vc = new Vehicle_c();
vc.name='Test Vehicle';
upsert vc;
//Create Equiment for(Integer i=0;i caselist = [Select count(id) from case where case]
Test.stopTest();
}
```