APEX TESTING

1. Get Started with Apex Unit Tests

Challenge

```
@isTest
private class TestVerifyDate
{
    @isTest static void testOldDate()
    {
        Date dt1 = system.today();
        Date dt2 = system.today() - 10;
        Date dt = VerifyDate.CheckDates(dt1,dt2);
        System.assertEquals(date.newInstance(2022, 5, 31), dt);
    }

    @isTest static void testDateWithin30Days()
    {
        Date dt1 = system.today();
        Date dt2 = system.today() + 20;
        Date dt = VerifyDate.CheckDates(dt1,dt2);
        System.assertEquals(dt2, dt);
    }

    @isTest static void testDateAbove30Days()
    {
        Date dt1 = system.today();
        Date dt2 = system.today() + 35;
        Date dt = VerifyDate.CheckDates(dt1,dt2);
        System.assertEquals(date.newInstance(2022, 5, 31), dt);
    }
}
```

2. Test Apex Triggers

Challenge

```
@isTest
public class TestRestrictContactByName
{
	@isTest static void testInvalidLastName()
	{
		Contact c = new Contact(FirstName = 'Sreelal', LastName='INVALIDNAME');
		Boolean isSuccess = true;
		try
		{
			Test.startTest();
			insert c;
			Test.stopTest();
		}
		catch(Exception e)
		{
			isSuccess = false;
		}
		System.assertEquals(true,isSuccess);
	}
}
```

3. Create Test Data for Apex Tests

Challenge

```
public class RandomContactFactory
{
	public static List<Contact> generateRandomContacts(Integer n,String lastName)
	{
		List<Contact> contactList= new List<Contact>();
		for(Integer i=0; i<n; i++)
		{
			Contact c=new Contact(FirstName='Test'+i,LastName=lastName);
			contactList.add(c);
		}
	return contactList;
	}
}
```