# NUnit Hands-On Lab 5 - Solutions

## Scenario 1: Ensure that there is no null value in the collection

[Test]  
public void GetEmployees\_ShouldNotContainNullValues()  
{  
 var employees = CollectionsLib.EmployeeManager.GetEmployees();  
 Assert.That(employees, Is.All.Not.Null);  
}

## Scenario 2: Verify whether the employee having his/her id 100 exists in the collection

[Test]  
public void GetEmployees\_ShouldContainEmployeeWithId100()  
{  
 var employees = CollectionsLib.EmployeeManager.GetEmployees();  
 Assert.That(employees.Any(emp => emp.Id == 100), Is.True);  
}

## Scenario 3: Check whether GetEmployees returns only unique employees

// Ensure Equals() and GetHashCode() are overridden in Employee class  
[Test]  
public void GetEmployees\_ShouldReturnUniqueEmployees()  
{  
 var employees = CollectionsLib.EmployeeManager.GetEmployees();  
 var uniqueEmployees = employees.Distinct().ToList();  
 Assert.That(uniqueEmployees.Count, Is.EqualTo(employees.Count));  
}

## Scenario 4: Compare GetEmployees and GetEmployeesWhoJoinedInPreviousYears collections

[Test]  
public void Compare\_TwoEmployeeCollections\_AreEqual()  
{  
 var current = CollectionsLib.EmployeeManager.GetEmployees();  
 var previous = CollectionsLib.EmployeeManager.GetEmployeesWhoJoinedInPreviousYears();  
 CollectionAssert.AreEquivalent(current, previous); // Classic Model  
  
 Assert.That(current, Is.EquivalentTo(previous)); // Constraint Model  
}