# Test Description

**Test Name or ID**: T001 – T005

**Test Type**: Black box

**Description**: To compute the distance between two locations and update the minimum distance value.

**Setup:** To carry out testing of this function, linking to the Visual Studio Unit Testing template was performed and assert equal method was used.

**Test Function**: double returnDistance(int loc1[2], int loc2[2], double\* minDestination)

**Test Scenarios:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Description | Test Data | Expected Result | Actual Result | Pass/Fail |
| Both locations have the same coordinates | Loc1 = {3,4}  Loc2 = {3,4}  minDestination = 5.0 | 0.0 | (TBC) | (TBC) |
| Locations are on the same horizontal line | Loc1 = {2,4}  Loc2 = {8,4}  minDestination = 5.0 | 6.0 | (TBC) | (TBC) |
| Locations are on the same vertical line | Loc1 = {5,3}  Loc2 = {5,9}  minDestination = 8.0 | 6.0 | (TBC) | (TBC) |
| Locations form a right-angled triangle | Loc1 = {2,2}  Loc2 = {5,6}  minDestination = 10.0 | 5.0 | (TBC) | (TBC) |
| Locations are at arbitrary coordinates | Loc1 = {0,0}  Loc2 = {10,10}  minDestination = 15.0 | 14.14213562 | (TBC) | (TBC) |

**Bugs Found**: Not yet found.