**Scenario Configuration**

| **Name** | **Class** | **Scenario** |
| --- | --- | --- |
| 1st Scenario | AdjacencyListGraph |  |
| 2nd Scenario | AdjacencyListGraph |  |
| 3rd Scenario | AdjacencyListGraph |  |
| 4th Scenario | AdjacencyListGraph |  |

**Test Cases Design**

| **Test goal:** a directed graph without weight is correctly added. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | addVertex(T) | 1st Scenario | Integer = 14 | vertex count + 1 |

| **Test goal:** a not directed graph with weight is correctly added. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | addVertex(T) | 2nd Scenario | Integer = 14 | vertex count + 1 |

| **Test goal:** a directed graph without weight is correctly added. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | addVertex(T) | 3rd Scenario | Integer = 14 | vertex count + 1 |

| **Test goal:** a not directed graph without weight is correctly added. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | addVertex(T) | 4th Scenario | Integer = 14 | vertex count + 1 |

| **Test goal:** add edge to a directed graph with weight. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | addEdge(T, T, double) | 1st Scenario | source = 1  destination = 3  weight = 7.77 | edges count + 1 |

| **Test goal:** add edge to a not directed graph with weight. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | addEdge(T, T, double) | 2nd Scenario | source = 1  destination = 3  weight = 7.77 | edges count + 1 |

| **Test goal:** add edge to a directed graph without weight. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | addEdge(T, T, double) | 3rd Scenario | source = 1  destination = 3  weight = 7.77 | edges count + 1 |

| **Test goal:** add edge to a not directed graph without weight. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | addEdge(T, T,double) | 4th Scenario | source = 1  destination = 3  weight = 7.77 | edges count + 1 |

| **Test goal:** remove a vertex of a directed graph with weight. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | deleteVertex(T) | 1st Scenario | Integer = 14 | vertex count = 9  edges count = 4 |

| **Test goal:** remove a vertex of a not directed graph with weight. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | deleteVertex(T) | 2nd Scenario | Integer = 14 |  |

| **Test goal:** remove a vertex of a directed graph without weight. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | deleteVertex(T) | 3rd Scenario | Integer = 14 |  |

| **Test goal:** remove a vertex of a not directed graph without weight. | | | | |
| --- | --- | --- | --- | --- |
| **Class** | **Method** | **Scenario** | **Input** | **Output** |
| AdjacencyListGraph | deleteVertex(T) | 1st Scenario |  |  |