**Test documentation**

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| Name | Class | Stage |
| setUpScenary | GraphAlgorithmsAMTest | A simple graph with 9 vertices and 17 edges |
| setUpScenary1 | GraphAlgorithmsAMTest | A directed graph with 5 vertices and 6 edges |
| setUpScenary2 | GraphAlgorithmsAMTest | A simple graph with 5 vertices and 7 edges |
| setUpScenary3 | GraphAlgorithmsAMTest | A simple graph with 5 vertices and 7 edges |
| setUpScenary4 | GraphAlgorithmsAMTest | A simple graph with 5 vertices and 7 edges |
| setUpScenary5 | GraphAlgorithmsAMTest | A directed graph with 5 vertices and 7 edges |
| setUpScenary6 | GraphAlgorithmsAMTest | A simple graph with 5 vertices and 7 edges |
| setUpScenary7 | GraphAlgorithmsAMTest | A directed graph with 4 vertices and 6 edges |
| setUpScenary8 | GraphAlgorithmsAMTest | A simple graph with 6 vertices and 9 edges |
| setUpScenary | GraphAlgorithmsALTest | A simple graph with 9 vertices and 17 edges |
| setUpScenary1 | GraphAlgorithmsALTest | A simple graph with 5 vertices and 6 edges |
| setUpScenary2 | GraphAlgorithmsALTest | A simple graph with 5 vertices and 7 edges |
| setUpScenary6 | GraphAlgorithmsALTest | A simple graph with 5 vertices and 7 edges |
| setUpScenary7 | GraphAlgorithmsALTest | A directed graph with 4 vertices and 6 edges |
| setUpScenary8 | GraphAlgorithmsALTest | A simple graph with 6 vertices and 9 edges |

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| **Test Objective:** Verify if the method is working correctly by returning the correct road with bfs technique | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | bfsTest | setUpScenary |  | All positions are the spected |

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| **Test Objective:** Verify if the method is working correctly by returning the correct road with bfs technique | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | bfsTest2 | setUpScenary5 |  | All positions are the expected |

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| **Test Objective:** Verify if the method is working correctly by returning the correct road with dfs technique | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | dfsTest | setUpScenary1 |  | All positions are the spected |

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| **Test Objective:** Verify if the method is working correctly by looking the road weight | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | primTest | setUpScenary2 |  | The road weight is the expected (15) |

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| **Test Objective:** Verify if the method is working correctly by looking the road weight | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | primTest2 | setUpScenary3 |  | The road weight is the expected (11) |

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| **Test Objective:** Verify if the method is working correctly by if edges in the list have the expected source, destination and weight | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | kruskalTest | setUpScenary2 |  | All edges have the expected source, destination and weight |

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| **Test Objective:** Verify if the method is working correctly by if edges in the list have the expected source, destination and weight | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | kruskalTest2 | setUpScenary3 |  | All edges have the expected source, destination and weight |

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| **Test Objective:** Verify if the method is working correctly by looking if the sum of the weights is the expected | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | dijkstraTest | setUpScenary6 |  | The sum is the expected |

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| **Test Objective:** Verify if the method is working correctly by looking if the sum of the weights is the expected | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | dijkstraTest1 | setUpScenary8 |  | The sum is the expected |

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| **Test Objective:** Verify if the method is working correctly by looking if positions in weights matrix are the expected | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | floydWarshallTest | setUpScenary6 |  | All positions in the matrix are the expected |

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| **Test Objective:** Verify if the method is working correctly by looking if positions in weights matrix are the expected | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsAMTest | floydWarshallTest1 | setUpScenary7 |  | All positions in the matrix are the expected |

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| **Test Objective:** Verify if the method is working correctly by looking the road weight | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsALTest | primTest | setUpScenary2 |  | The road weight is the expected (15) |

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| **Test Objective:** Verify if the method is working correctly by looking if the sum of the weights is the expected | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsALTest | dijkstraTest | setUpScenary6 |  | The sum is the expected |

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| **Test Objective:** Verify if the method is working correctly by looking if the sum of the weights is the expected | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsALTest | dijkstraTest1 | setUpScenary8 |  | The sum is the expected |

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| **Test Objective:** Verify if the method is working correctly by looking if positions in weights matrix are the expected | | | | |
| **Class** | **Method** | **Stage** | **Input** | **Outcome** |
| GraphAlgorithmsALTest | floydWarshallTest | setUpScenary6 |  | All positions in the matrix are the expected |