Function/Acceptance/Requirement	Test Run	Bugs Fixed	Passed
validatePackageWeight	T001		☑
validatePackageWeight	T002	Package weight exceeds the available weight limit of the truck (1200.0)	☑
validatePackageWeight	T003	Package weight is below the truck's allowable weight threshold (0.0)	☑
validatePackageWeight	T004	Package weight is less than the truck's minimum weight limit (0.0)	☑
validatePackageVolume	T005		☑
validatePackageVolume	T006	The package volume is presented as negative, contrary to the truck's volume capacity	☑
validatePackageVolume	T007		☑
validatePackageVolume	T008	The package volume is stated to be within the truck's volume capacity, but it is zero	☑
isTruckAvailable	T009	The package weight exceeds the blue truck's weight capacity	☑
isTruckAvailable	T010	The package volume exceeds the blue truck's volume capacity	☑
isTruckAvailable	T011	The package both exceeds the blue truck's weight and volume capacity.	☑
isTruckAvailable	T012		☑
compareTruckCapacity	T013		☑
compareTruckCapacity	T014	Truck 2 is stated to have more remaining capacity, but Truck 1 actually has more	☑
compareTruckCapacity	T015		☑
compareTruckCapacity	T016	Truck 1 is reported as fully loaded, but it still has available capacity	☑
getNumRows	T017		☑
getNumRows	T018		☑
getNumRows	T019		☑
getNumRows	T020	The function incorrectly counts the number of rows on a map when the number of rows is explicitly set to zero	☑
distance	T021		☑
distance	T022		☑
distance	T023		☑
distance	T024	The function incorrectly calculates the distance between two points with negative coordinates	☑
validatePackageWeight	T025		☑
validatePackageWeight	T026		☑
validatePackageWeight	T027	The function incorrectly passes for a weight exceeding the maximum allowed weight	☑
validatePackageWeight	T028		☑
validatePackageVolume	T029		☑
validatePackageVolume	T030		☑
validatePackageVolume	T031	The function incorrectly approves a volume that exceeds the maximum allowed volume limit	☑
validatePackageVolume	T032		☑
validateDestination	T033		☑

validateDestination	T034	The function incorrectly approves a destination point outside the map boundaries	☑
validateDestination	T035		☑
validateDestination	T036		☑
isTruckAvailable	T037		☑
isTruckAvailable	T038	The function wrongly becuase the truck doesn't have enough weight for the package	☑
isTruckAvailable	T039		☑
isTruckAvailable	T040		☑
isNextToDes	T041		☑
isNextToDes	T042		☑
isNextToDes	T043	The function mistakenly marks points as not adjacent when they are actually adjacent	☑
isNextToDes	T044		☑
isNextToDes	T045		☑
decideTruckForDelivery	T046		☑
decideTruckForDelivery	T047		☑
decideTruckForDelivery	T048	If no trucks are full loaded, should return -1	☑
truckShortestPath	T049		☑
truckShortestPath	T050		☑
truckShortestPath	T051	blue truck shoud go to the divert route 18V, 17V, 16V, 15V, 14V, 13V, 12V, 11V, 10V, 9V8V, 7V, 7W, 7X, 7Y, 8Y as in the instruction for point 8Y	☑
truckShortestPath	T052		☑
truckShortestPath	T053		☑
updateTruckStatus	T054		☑
updateTruckStatus	T055		☑
updateTruckStatus	T056		☑
updateTruckStatus	T057	If provide a invalid truck index, shoud not update any trucks	☑
compareTruckCapacity	T058		☑
compareTruckCapacity	T059	when blue and green has same compacity, should return blue index	☑
compareTruckCapacity	T060		☑
compareTruckCapacity	T061		☑
printDeliveryRoute	T062		☑
printDeliveryRoute	T063		☑
printDeliveryRoute	T064		☑
printDeliveryRoute	T065		☑
printDeliveryRoute	T066		☑

printDeliveryRoute	T067		☑
shorstestIndex	T068		☑
shorstestIndex	T069		☑
shorstestIndex	T070		☑
shorstestIndex	T071		☑
tieOnTheShortest	T072		☑
tieOnTheShortest	T073		☑
tieOnTheShortest	T074		☑
tieOnTheShortest	T075		☑
Validate Package and Select Truck	T076		☑
Validate Package and Select Truck	T077	Truck still accepted even if over weight or volume limit. Vallidation should fail	☑
isTruckAvailable and decideTruckForDe	T078		☑
isTruckAvailable and decideTruckForDe	T079	Originally gave an error. Alternative path that is closest to destination is selected since required truck is full.	☑
isTruckAvailable and decideTruckForDe	T080	Originally gave an error. Required yellow path should be selected since it is available.	☑
isTruckAvailable and decideTruckForDe	T081	Green truck is selected. Expected yellow truck since it has greatest available capacity.	☑
Shortest Path Calculation and Delivery I	T082		☑
Shortest Path Calculation and Delivery I	T083		☑
Shortest Path Calculation and Delivery I	T084		☑
Shortest Path Calculation and Delivery I	T085	Blue truck should be selected since it is still available.	☑
Comprehensive Delivery Scenario	T086		☑
Comprehensive Delivery Scenario	T087		☑
Comprehensive Delivery Scenario	T088		☑
Comprehensive Delivery Scenario	T089	None of the trucks should be available since they are all full.	☑