

Function	#	Description	Sample Input Data	Expected Output	Actual Output	P/F
setEmptyPassengers	1	input data has a passenger array with 16 elements with each member having properties with garbage values	passengerList[] where each passenger in the array's properties are garbage values	[p ₁ , p ₂ , p ₃ , ... , p ₁₆] where properties of any p from p ₁ to p ₁₆ are as follows: firstName="", lastName="", onboard=0, priority=0, id=0, dropOff=0, reserved=0	[p ₁ , p ₂ , p ₃ , ... , p ₁₆] where properties of any p from p ₁ to p ₁₆ are as follows: firstName="" lastName="", onboard=0, priority=0, id=0, dropOff=0, reserved=0	P
	2					P
	3					P
initializeBuses	1	initial values of structure array trip are members with garbage values	trip[] where each Bus' properties are garbage values	members m have the following properties: m ₁ , m ₂ , m ₃ , ... , m ₁₀ have trip have trip numbers 101, 102, 103, ... , 110 respectively m ₁₁ , m ₁₂ , m ₁₃ , ... , m ₁₂ have trip have trip numbers 150, 151, 152, ... , 161 respectively for all m except for m where trip number is 110 or 161 dispatchable = 1 otherwise, dispatchable = 0 for m with trip numbers 101, 103, 105, 107, 109 route = [20050, 10010, 10020, 10040, 0] for m with trip numbers 102, 104, 106, 108, 110 route = [20050, 10030, 10040, 0, 0] for m with trip numbers 150, 152, 154, 156, 158, 160 route = [10040, 20010, 20030, 20040, 20050] for m with trip numbers 151, 153, 155, 157, 159, 161 route = [10040, 20020, 20030, 20040, 20050] for all m, nReserveCount = 0 for all m, with passengers[] and for all p passengers, passengers are set to createEmptyPassenger() for all m with a particular trip number, next is linked as such with the pointer to each bus 101->102->103->104->105->106->107->108->109 140->151->152->153->154->155->156->157->158->159->160	members m have the following properties: m ₁ , m ₂ , m ₃ , ... , m ₁₀ have trip have trip numbers 101, 102, 103, ... , 110 respectively m ₁₁ , m ₁₂ , m ₁₃ , ... , m ₁₂ have trip have trip numbers 150, 151, 152, ... , 161 respectively for all m except for m where trip number is 110 or 161 dispatchable = 1 otherwise, dispatchable = 0 for m with trip numbers 101, 103, 105, 107, 109 route = [20050, 10010, 10020, 10040, 0] for m with trip numbers 102, 104, 106, 108, 110 route = [20050, 10030, 10040, 0, 0] for m with trip numbers 150, 152, 154, 156, 158, 160 route = [10040, 20010, 20030, 20040, 20050] for m with trip numbers 151, 153, 155, 157, 159, 161 route = [10040, 20020, 20030, 20040, 20050] for all m, nReserveCount = 0 for all m, with passengers[] and for all p passengers, passengers are set to createEmptyPassenger() for all m with a particular trip number, next is linked as such with the pointer to each bus 101->102->103->104->105->106->107->108->109 140->151->152->153->154->155->156->157->158->159->160	P
	2					P
	3					P
stringToInt	1	input data contains a string with a single character	str = "5"	5	5	P
	2	input data contains a string four characters	str = "2025"	2025	2025	P
	3	input data contains a string with a leading zero	str = "01"	1	1	P
getPassengerCount	1	bus with all passengers that have property onboard set to 0 (not onboard)	passengerList in bus is [p ₁ , p ₂ , p ₃ , ... , p ₁₆] where p _n . onboard = 0 for all p	0	0	P
	2	bus with all passengers that have property onboard set to 1 (onboard)	passengerList in bus is [p ₁ , p ₂ , p ₃ , ... , p ₁₆] where p _n . onboard = 1 for all p	16	16	P
	3	bus with every other passenger has their property onboard set to 1 (onboard)	passengerList in bus = [p ₁ , p ₂ , p ₃ , ... , p ₁₆] where p _n . onboard = 1 when n is even	8	8	P
isTripFull	1	bus with no passengers onboard	passengerList in bus is [p ₁ , p ₂ , p ₃ , ... , p ₁₆] where p _n . onboard = 0 for all p	0	0	P
	2	bus with all 16 passengers onboard	passengerList in bus is [p ₁ , p ₂ , p ₃ , ... , p ₁₆] where p _n . onboard = 1 for all p	1	1	P
	3	bus with 13 passengers onboard	passengerList in bus = [p ₁ , p ₂ , p ₃ , ... , p ₁₆] where p _n . onboard = 1 when n <= 13	0	0	P
getBusFromTripNumber	1	trip number specified matches a bus trip number	trips[] with a bus that has a trip number of 109 tripNumber = 109	pointer to the bus with a trip number of 109 that is found in the array of trips	pointer to the bus with a trip number of 109 that is found in the array of trips	P
	2	trip number specified does not match any bus trip number	trips[] with bus numbers from 101-110 and 150-161 tripNumber = 140	NULL	NULL	P
	3	trip number specified corresponds to a special trip number	trips[] with a bus that has a special trip number of 110 tripNumber = 110	pointer to the bus with a trip number of 110 that is found in the array of trips	pointer to the bus with a trip number of 110 that is found in the array of trips	P
displayTripList	1	trips array where the special trips are not yet dispatchable	trips[] with special trip numbers 110 and 161 have their dispatchable property set to 0	The list of Manila to Laguna buses from AE-101 to AE-109 and the list of Laguna to Manila buses from AE-150 to AE-160	The list of Manila to Laguna buses from AE-101 to AE-109 and the list of Laguna to Manila buses from AE-150 to AE-160	P
	2	trips array where the special trip 110 is dispatchable and linked, but not special trip 161	trips[] with special trip number 110 dispatchable property set to 1 and special trip number 161 dispatchable property set to 0	The list of Manila to Laguna buses from AE-101 to AE-110 and the list of Laguna to Manila buses from AE-150 to AE-160	The list of Manila to Laguna buses from AE-101 to AE-110 and the list of Laguna to Manila buses from AE-150 to AE-160	P
	3	trips array where special trip 161 is dispatchable and linked, but not special trip 110	trips[] with special trip number 110 dispatchable property set to 0 and special trip number 161 dispatchable property set to 1	The list of Manila to Laguna buses from AE-101 to AE-109 and the list of Laguna to Manila buses from AE-150 to AE-161	The list of Manila to Laguna buses from AE-101 to AE-109 and the list of Laguna to Manila buses from AE-150 to AE-161	P
	4	trips array where special trips 110 and 161 are dispatchable and linked	trips[] with special trip numbers 110 and 161 have their dispatchable property set to 1	The list of Manila to Laguna buses from AE-101 to AE-110 and the list of Laguna to Manila buses from AE-150 to AE-161	The list of Manila to Laguna buses from AE-101 to AE-110 and the list of Laguna to Manila buses from AE-150 to AE-161	P
getInputTripNumber	1	user tries to access a normal bus (101-109 or 150-160)	trips[] with special trip numbers 110 and 161 have their dispatchable property set to 0 user input: 104	pointer to the corresponding bus with a trip number of 104 found in the trip array passed	pointer to the corresponding bus with a trip number of 104 found in the trip array passed	P
	2	user inputs a number that does not correspond to any of the trip numbers	trips[] with special trip numbers 110 and 161 have their dispatchable property set to 0 user input: 115	program displays "Invalid trip number. Please enter a valid trip number." and attempts to take user input again	program displays "Invalid trip number. Please enter a valid trip number." and attempts to take user input again	P
	3	special bus 110 is not set to dispatchable, but user input attempts to access it	trips[] with special trip numbers 110 and 161 have their dispatchable property set to 0 user input: 110	program displays "Bus selected is not currently dispatchable. Please enter a trip number listed." and attempts to take user input again	program displays "Bus selected is not currently dispatchable. Please enter a trip number listed." and attempts to take user input again	P
isValidTripNumber	1	input is a valid trip number	input: 101	1	1	P
	2	input is a valid trip number of a special bus	input: 110	1	1	P
	3	input is not a valid trip number	input: 169	0	0	P
printDropOffPointFromCode	1	input is any valid code (10010, 10020, 10030, 10040, 20010, 20020, 20030, 20040, 20050)	input: 10010	program displays: Mamplasan Toll Exit	program displays: Mamplasan Toll Exit	P
	2		input: 10030	program display: Laguna Blvd. Guard House	program display: Laguna Blvd. Guard House	P

Function	#	Description	Sample Input Data	Expected Output	Actual Output	P/F
	3	20030, 20040, 20050)	input: 20050	program displays: Gate 1: South Gate (LS Building Entrance)	program displays: Gate 1: South Gate (LS Building Entrance)	P
getDropOffPointFromCode	1	input is any valid code (10010, 10020, 10030, 10040, 20010, 20020, 20030, 20040, 20050)	input: 10020, and a string with any value	program sets the string value to "Phase 5, San Jose Vilage"	program sets the string value to "Phase 5, San Jose Vilage"	P
	2		input: 10040, and a string with any value	program sets the string value to "Milagros Del Rosario Building - East Canopy"	program sets the string value to "Milagros Del Rosario Building - East Canopy"	P
	3		input: 20020, and a string with any value	program sets the string value to "College of St. Benilde (CSB) along Taft Avenue"	program sets the string value to "College of St. Benilde (CSB) along Taft Avenue"	P
getDropOffCodeFromString	1	input is a string set to the name of any valid drop-off	input: "Mamplasan Toll Exit"	10010	10010	P
	2		input: "Petron Gasoline Station along Gil Puyat Avenue"	20010	20010	P
	3		input: "Milagros Del Rosario Building - East Canopy"	10040	10040	P
setPassenger	1	input passenger is empty	input: passenger is an empty passenger priority = 3 firstName = "Sky" lastName = "Garcia" id = 12409537 dropOffPoint = 10010 nReserve = 0	Passenger has the following properties: priority = 3 firstName = "Sky" lastName = "Garcia" id = 12409537 dropOffPoint = 10010 nReserve = 0	Passenger has the following properties: priority = 3 firstName = "Sky" lastName = "Garcia" id = 12409537 dropOffPoint = 10010 nReserve = 0	P
	2	input passenger has set values already	Passenger already has the following properties as follows priority = 3 firstName = "Sky" lastName = "Garcia" id = 12409537 dropOffPoint = 10010 nReserve = 0 input data is as follows: priority = 6 firstName = "John" lastName = "Doe" id = 12412345 dropOffPoint = 10030 nReserve = 1	Passenger has the following properties: priority = 6 firstName = "John" lastName = "Doe" id = 12412345 dropOffPoint = 10030 nReserve = 1	Passenger has the following properties: priority = 6 firstName = "John" lastName = "Doe" id = 12412345 dropOffPoint = 10030 nReserve = 1	P
	3	input passenger is all garbage values	Passenger's properties are all garbage values input data is as follows: priority = 6 firstName = "John" lastName = "Doe" id = 12412345 dropOffPoint = 10030 nReserve = 1	Passenger has the following properties: priority = 6 firstName = "John" lastName = "Doe" id = 12412345 dropOffPoint = 10030 nReserve = 1	Passenger has the following properties: priority = 6 firstName = "John" lastName = "Doe" id = 12412345 dropOffPoint = 10030 nReserve = 1	P
inputPassenger	1	Passenger is the first to board a trip	ID Number: 12409537 First Name (NOTE: DO NOT INCLUDE ANY SPACES): Sky Last Name: (NOTE: DO NOT INCLUDE ANY SPACES): Garcia Priority Number: 3 Do you want to reserve? 1 - Yes 0 - No 0 Drop off Point: 1 (10010) - Mamplasan Toll Exit 2 (10020) - Phase 5, San Jose Vilage 3 (10040) - Milagros Del Rosario Building - East Canopy 1	Passenger Input Successfully! Name : Garcia, Sky ID Number : 12409537 Priority : 3 Seat Number : 1 Trip Number : AE-101	Passenger Input Successfully! Name : Garcia, Sky ID Number : 12409537 Priority : 3 Seat Number : 1 Trip Number : AE-101	P
	2	Passenger reserves a blank seat in a bus that isn't full yet and has less than 13 passengers	ID Number: 12324567 First Name (NOTE: DO NOT INCLUDE ANY SPACES): Matthew Last Name: (NOTE: DO NOT INCLUDE ANY SPACES): Ong Priority Number: 1 Do you want to reserve? 1 - Yes 0 - No 1 Please input a seat number from 1 to 13: 6 Drop off Point: 1 (10010) - Mamplasan Toll Exit 2 (10020) - Phase 5, San Jose Vilage 3 (10040) - Milagros Del Rosario Building - East Canopy 1	Passenger Input Successfully! Name : Ong, Matthew ID Number : 12324567 Priority : 1 Seat Number : 6 Trip Number : AE-101	Passenger Input Successfully! Name : Ong, Matthew ID Number : 12324567 Priority : 1 Seat Number : 6 Trip Number : AE-101	P
	3	Passenger reserves a taken seat of a lower priority non-reserved passenger in a bus that is not full	ID Number: 12149876 First Name (NOTE: DO NOT INCLUDE ANY SPACES): Mark Last Name: (NOTE: DO NOT INCLUDE ANY SPACES): Alvinez Priority Number: 1 Do you want to reserve? 1 - Yes 0 - No 1 Please input a seat number from 1 to 13: 2 Drop off Point: 1 (10010) - Mamplasan Toll Exit 2 (10020) - Phase 5, San Jose Vilage 3 (10040) - Milagros Del Rosario Building - East Canopy 1	Moving a Lucas Fenril to another seat to accomodate Mark Alvinez. Passenger Input Successfully! Name : Alvinez, Mark ID Number : 12149876 Priority : 1 Seat Number : 2 Trip Number : AE-101 Passenger Input Successfully! Name : Fenril, Lucas ID Number : 12345678 Priority : 2 Seat Number : 3 Trip Number : AE-101	Moving a Lucas Fenril to another seat to accomodate Mark Alvinez. Passenger Input Successfully! Name : Alvinez, Mark ID Number : 12149876 Priority : 1 Seat Number : 2 Trip Number : AE-101 Passenger Input Successfully! Name : Fenril, Lucas ID Number : 12345678 Priority : 2 Seat Number : 3 Trip Number : AE-101	P
searchPassengerId	1	input is a unique ID	input: 12416723	0	0	P
	2	input is a unique ID, but is not a usual DLSU-formatted ID number	input: 45367623	0	0	P
	3	input is an ID that already exists in some trip	input: 12416723	1	1	P

Function	#	Description	Sample Input Data	Expected Output	Actual Output	P/F
encodePassengerInformation	1	user inputs all valid information and does not reserve a set	trip with trip number 101 has no passengers onboard user input data in this sequence: 101 12412345 Gian Ortha 4 0 1	Program displays the following: What trip will you be boarding? (Please input the 3-digit number of the trip excluding the "AE") =====List of Trips===== ====MANILA-LAGUNA==== ====LAGUNA-MANILA==== AE-101 AE-150 AE-102 AE-151 AE-103 AE-152 AE-104 AE-153 AE-105 AE-154 AE-106 AE-155 AE-107 AE-156 AE-108 AE-157 AE-109 AE-158 AE-159 AE-160 ===== Please input a trip number from the list above. 101 =====Enter Details Below===== ID Number: 12412345 First Name (NOTE: DO NOT INCLUDE ANY SPACES): Gian Last Name: (NOTE: DO NOT INCLUDE ANY SPACES): Ortha Priority Number: 4 Do you want to reserve? 1 - Yes 0 - No 0 Drop off Point: 1 (10010) - Mamplasan Toll Exit 2 (10020) - Phase 5, San Jose Village 3 (10040) - Milagros Del Rosario Building - East Canopy 1 Passenger Input Successfully! Name : Ortha, Gian ID Number : 12412345 Priority : 4 Seat Number : 1 Trip Number : AE-101 Type any character and press return to continue	Program displays the following: What trip will you be boarding? (Please input the 3-digit number of the trip excluding the "AE") =====List of Trips===== ====MANILA-LAGUNA==== ====LAGUNA-MANILA==== AE-101 AE-150 AE-102 AE-151 AE-103 AE-152 AE-104 AE-153 AE-105 AE-154 AE-106 AE-155 AE-107 AE-156 AE-108 AE-157 AE-109 AE-158 AE-159 AE-160 ===== Please input a trip number from the list above. 101 =====Enter Details Below===== ID Number: 12412345 First Name (NOTE: DO NOT INCLUDE ANY SPACES): Gian Last Name: (NOTE: DO NOT INCLUDE ANY SPACES): Ortha Priority Number: 4 Do you want to reserve? 1 - Yes 0 - No 0 Drop off Point: 1 (10010) - Mamplasan Toll Exit 2 (10020) - Phase 5, San Jose Village 3 (10040) - Milagros Del Rosario Building - East Canopy 1 Passenger Input Successfully! Name : Ortha, Gian ID Number : 12412345 Priority : 4 Seat Number : 1 Trip Number : AE-101 Type any character and press return to continue	P
	2	user inputs all valid information and reserves a seat on a trip with less than 13 passengers	trip with trip number 101 has no passengers onboard user input data in this sequence: 101 12412345 Gian Ortha 4 1 3 1	Program displays the following: What trip will you be boarding? (Please input the 3-digit number of the trip excluding the "AE") =====List of Trips===== ====MANILA-LAGUNA==== ====LAGUNA-MANILA==== AE-101 AE-150 AE-102 AE-151 AE-103 AE-152 AE-104 AE-153 AE-105 AE-154 AE-106 AE-155 AE-107 AE-156 AE-108 AE-157 AE-109 AE-158 AE-159 AE-160 ===== Please input a trip number from the list above. 101 =====Enter Details Below===== ID Number: 12412345 First Name (NOTE: DO NOT INCLUDE ANY SPACES): Gian Last Name: (NOTE: DO NOT INCLUDE ANY SPACES): Ortha Priority Number: 4 Do you want to reserve? 1 - Yes 0 - No 1 Please input a seat number from 1 to 13: 3 Drop off Point: 1 (10010) - Mamplasan Toll Exit 2 (10020) - Phase 5, San Jose Village 3 (10040) - Milagros Del Rosario Building - East Canopy 1 Passenger Input Successfully! Name : Ortha, Gian ID Number : 12412345 Priority : 4 Seat Number : 3 Trip Number : AE-101 Type any character and press return to continue	Program displays the following: What trip will you be boarding? (Please input the 3-digit number of the trip excluding the "AE") =====List of Trips===== ====MANILA-LAGUNA==== ====LAGUNA-MANILA==== AE-101 AE-150 AE-102 AE-151 AE-103 AE-152 AE-104 AE-153 AE-105 AE-154 AE-106 AE-155 AE-107 AE-156 AE-108 AE-157 AE-109 AE-158 AE-159 AE-160 ===== Please input a trip number from the list above. 101 =====Enter Details Below===== ID Number: 12412345 First Name (NOTE: DO NOT INCLUDE ANY SPACES): Gian Last Name: (NOTE: DO NOT INCLUDE ANY SPACES): Ortha Priority Number: 4 Do you want to reserve? 1 - Yes 0 - No 1 Please input a seat number from 1 to 13: 3 Drop off Point: 1 (10010) - Mamplasan Toll Exit 2 (10020) - Phase 5, San Jose Village 3 (10040) - Milagros Del Rosario Building - East Canopy 1 Passenger Input Successfully! Name : Ortha, Gian ID Number : 12412345 Priority : 4 Seat Number : 3 Trip Number : AE-101 Type any character and press return to continue	P

Function	#	Description	Sample Input Data	Expected Output	Actual Output	P/F
				<div>Program displays the following:</div> <div>What trip will you be boarding? (Please input the 3-digit number of the trip excluding the "AE")</div> <div><div>=====List of Trips=====</div><div>====MANILA-LAGUNA====</div><div>====LAGUNA-MANILA====</div><div><div>AE-101</div><div>AE-102</div><div>AE-103</div><div>AE-104</div><div>AE-105</div><div>AE-106</div><div>AE-107</div><div>AE-108</div><div>AE-109</div></div><div><div>AE-150</div><div>AE-151</div><div>AE-152</div><div>AE-153</div><div>AE-154</div><div>AE-155</div><div>AE-156</div><div>AE-157</div><div>AE-158</div><div>AE-159</div><div>AE-160</div></div></div> <div>=====</div> <div>trip with trip number 101 has 13 passengers onboard on the first 13 seats</div> <div>user input data in this sequence:</div> <div>101</div> <div>12412345</div> <div>Gian</div> <div>Ortha</div> <div>4</div> <div>1</div> <div>14</div> <div>1</div> <div>Please input a trip number from the list above.</div> <div>101</div> <div>=====Enter Details Below=====</div> <div>ID Number:</div> <div>12412345</div> <div>First Name (NOTE: DO NOT INCLUDE ANY SPACES):</div> <div>Gian</div> <div>Last Name (NOTE: DO NOT INCLUDE ANY SPACES):</div> <div>Ortha</div> <div>Priority Number: 4</div> <div>Do you want to reserve?</div> <div>1 - Yes</div> <div>0 - No</div> <div>1</div> <div>Please input a seat number from 1 to 16:</div> <div>14</div> <div>Drop off Point:</div> <div>1 (10010) - Mamplasan Toll Exit</div> <div>2 (10020) - Phase 5, San Jose Village</div> <div>3 (10040) - Milagros Del Rosario Building - East Canopy</div> <div>1</div> <div>Passenger Input Successfully!</div> <div>Name : Ortha, Gian</div> <div>ID Number : 12412345</div> <div>Priority : 4</div> <div>Seat Number : 14</div> <div>Trip Number : AE-101</div> <div>Type any character and press return to continue</div>	<div>Program displays the following:</div> <div>What trip will you be boarding? (Please input the 3-digit number of the trip excluding the "AE")</div> <div><div>=====List of Trips=====</div><div>====MANILA-LAGUNA====</div><div>====LAGUNA-MANILA====</div><div><div>AE-101</div><div>AE-102</div><div>AE-103</div><div>AE-104</div><div>AE-105</div><div>AE-106</div><div>AE-107</div><div>AE-108</div><div>AE-109</div></div><div><div>AE-150</div><div>AE-151</div><div>AE-152</div><div>AE-153</div><div>AE-154</div><div>AE-155</div><div>AE-156</div><div>AE-157</div><div>AE-158</div><div>AE-159</div><div>AE-160</div></div></div> <div>=====</div> <div>Please input a trip number from the list above.</div> <div>101</div> <div>=====Enter Details Below=====</div> <div>ID Number:</div> <div>12412345</div> <div>First Name (NOTE: DO NOT INCLUDE ANY SPACES):</div> <div>Gian</div> <div>Last Name (NOTE: DO NOT INCLUDE ANY SPACES):</div> <div>Ortha</div> <div>Priority Number: 4</div> <div>Do you want to reserve?</div> <div>1 - Yes</div> <div>0 - No</div> <div>1</div> <div>Please input a seat number from 1 to 16:</div> <div>14</div> <div>Drop off Point:</div> <div>1 (10010) - Mamplasan Toll Exit</div> <div>2 (10020) - Phase 5, San Jose Village</div> <div>3 (10040) - Milagros Del Rosario Building - East Canopy</div> <div>1</div> <div>Passenger Input Successfully!</div> <div>Name : Ortha, Gian</div> <div>ID Number : 12412345</div> <div>Priority : 4</div> <div>Seat Number : 14</div> <div>Trip Number : AE-101</div> <div>Type any character and press return to continue</div>	P
getBusFull	1	all trips on the Manila to laguna line are full	trips[] where for element bus _n bus ₁ , bus ₂ , bus ₃ , ... , bus ₉ each have 16 passengers nFullA = 0 nFullB = 0	nFullA is set to 1 bus ₉ .next is set to pointer to bus ₁₀ bus ₁₀ .dispatchable is set to 1	nFullA is set to 1 bus ₉ .next is set to pointer to bus ₁₀ bus ₁₀ .dispatchable is set to 1	P
	2	all trips to the Laguna to Manila line are full	trips[] where for element bus _n bus ₁₁ , bus ₁₂ , bus ₁₃ , ... , bus ₂₁ each have 16 passengers nFullA = 0 nFullB = 0	nFullB is set to 1 bus ₂₁ .next is set to pointer to bus ₂₂ bus ₂₂ .dispatchable is set to 1	nFullB is set to 1 bus ₂₁ .next is set to pointer to bus ₂₂ bus ₂₂ .dispatchable is set to 1	P
	3	nFullA and nFullB are already both set to 1	trips[] where for element bus _n bus ₁ , bus ₂ , bus ₃ , ... , bus ₂₂ each have 16 passengers nFullA = 1 nFullB = 1	no data is changed	no data is changed	P
displayPassengerCount	1	bus input contains exactly 13 passengers	bus with passenger list where first 13 passengers' onboard property is set to 1	<div>Program displays:</div> <div>+-----+-----+</div> <div> X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X D </div> <div>+-----+-----+</div> <div>Passenger Count: 13</div>	<div>Program displays:</div> <div>+-----+-----+</div> <div> X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X D </div> <div>+-----+-----+</div> <div>Passenger Count: 13</div>	P
	2	bus input contains more than 13 passengers	bus with passenger list where each passenger onboard property is set to 1	<div>Program displays:</div> <div>+-----+-----+</div> <div> X X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X D </div> <div>+-----+-----+</div> <div>Passenger Count: 16</div>	<div>Program displays:</div> <div>+-----+-----+</div> <div> X X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X X X X X </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X D </div> <div>+-----+-----+</div> <div>Passenger Count: 16</div>	P
	3	bus input contains passengers, with spaces between them	bus with passenger list where first 2 passengers' onboard property is set to 1 and the 4th passenger's onboard property is set to one.	<div>Program displays:</div> <div>+-----+-----+</div> <div> X X 0 </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X 0 0 </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> 0 0 0 </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> 0 0 0 </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> 0 D </div> <div>+-----+-----+</div> <div>Passenger Count: 3</div>	<div>Program displays:</div> <div>+-----+-----+</div> <div> X X 0 </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> X 0 0 </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> 0 0 0 </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> 0 0 0 </div> <div>+-----+-----+</div> <div>+-----+-----+</div> <div> 0 D </div> <div>+-----+-----+</div> <div>Passenger Count: 3</div>	P
	1	inputted trip is empty	AE101 is the selcted trip and it has 0 passengers	<div>=====</div> <div>Drop-off count for Trip Number AE-101</div> <div>0 - Mamplasan Toll Exit</div> <div>0 - Phase 5, San Jose Village</div> <div>0 - Milagros Del Rosario Building - East Canopy</div> <div>=====</div>	<div>=====</div> <div>Drop-off count for Trip Number AE-101</div> <div>0 - Mamplasan Toll Exit</div> <div>0 - Phase 5, San Jose Village</div> <div>0 - Milagros Del Rosario Building - East Canopy</div> <div>=====</div>	P

Function	#	Description	Sample Input Data	Expected Output	Actual Output	P/F
viewDropOffCount	2	Inputted trip has passengers	AE101 is the selected trip and it has 4 passengers. Two are going to Maplasan, and the other 2 are going to San Jose Village	Drop-off count for Trip Number AE-101 2 - Mamplasan Toll Exit 2 - Phase 5, San Jose Vilage 0 - Milagros Del Rosario Building - East Canopy	Drop-off count for Trip Number AE-101 2 - Mamplasan Toll Exit 2 - Phase 5, San Jose Village 0 - Milagros Del Rosario Building - East Canopy	P
	3	Inputted trip has passengers	AE101 is the selected trip and it has 3 passengers. One is going to Maplasan, one is going to San Jose Village, and the last is going to Milagros.	Drop-off count for Trip Number AE-101 1 - Mamplasan Toll Exit 1 - Phase 5, San Jose Vilage 1 - Milagros Del Rosario Building - East Canopy	Drop-off count for Trip Number AE-101 1 - Mamplasan Toll Exit 1 - Phase 5, San Jose Village 1 - Milagros Del Rosario Building - East Canopy	P
viewPassengerInformation	1	Inputted trip is empty	AE101 is the selected trip and it has no passengers onboard.	First Name Last Name ID NUMBER Priority	First Name Last Name ID NUMBER Priority	P
	2	Inputted trip has one passenger	AE101 has one passenger on board with the following information First Name: Fides Last Name: Bancoro ID Number: 12403537 Priority: 4	First Name Last Name ID NUMBER Priority Fides Bancoro 12403537 4	First Name Last Name ID NUMBER Priority Fides Bancoro 12403537 4	P
	3	Inputted trip has more than one passenger	AE101 has two passengers on board with the following information Pass1: First Name: Fides Last Name: Bancoro ID Number: 12403537 Priority: 4 Pass2: First Name: Daniel Last Name: David ID Number: 12419537 Priority: 5	First Name Last Name ID NUMBER Priority Fides Bancoro 12403537 4 Daniel David 12419537 5	First Name Last Name ID NUMBER Priority Fides Bancoro 12403537 4 Daniel David 12419537 5	P
searchPassenger	1	user inputs a last name that matches exactly 1 passenger on some trip	user inputs: Ortha trips 101 contains a passenger with the following information: Name: Ortha, Gian Priority 1 Seat #1 ID no. 12455555	Program displays: Passenger Found! First Name : Gian Last Name : Ortha Trip Number : 101 Seat Number : 1 ID Number : 12455555 Priority : 1	Program displays: Passenger Found! First Name : Gian Last Name : Ortha Trip Number : 101 Seat Number : 1 ID Number : 12455555 Priority : 1	P
	2	user inputs a last name that matches at more than 1 passenger on some trip	user inputs: Ortha trips contain 2 passengers with the last name ortha on trip 101: Ortha, Gian, priority 1, seat #1, ID no. 12455555 on trip 150: Ortha, Lorenzo, priority 2, seat #16, ID no. 12477777	Program displays: Passenger Found! First Name : Gian Last Name : Ortha Trip Number : 101 Seat Number : 1 ID Number : 12455555 Priority : 1 Passenger Found! First Name : Lorenzo Last Name : Ortha Trip Number : 150 Seat Number : 16 ID Number : 12477777 Priority : 2	Program displays: Passenger Found! First Name : Gian Last Name : Ortha Trip Number : 101 Seat Number : 1 ID Number : 12455555 Priority : 1 Passenger Found! First Name : Lorenzo Last Name : Ortha Trip Number : 150 Seat Number : 16 ID Number : 12477777 Priority : 2	P
	3	user inputs a last name that does not match any passengers on any trip	user inputs: allkjlkadfj	program displays: No passenger(s) with last name allkjlkadfj found!	program displays: No passenger(s) with last name allkjlkadfj found!	P
loadPassengerFromFile	1	file that user specifies exists and contains valid information	user inputs: "passenger.txt" File information is as follows: Trip Number: 109 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 12414697 Priority: 5 Drop-Off Point: Mamplasan Toll Exit	Program displays: Information scanned successfully! Inputting passenger... Passenger Input Sucessfully! Name : doe, john ID Number : 12414697 Priority : 5 Seat Number : 15 Trip Number : AE-109	Program displays: Information scanned successfully! Inputting passenger... Passenger Input Sucessfully! Name : doe, john ID Number : 12414697 Priority : 5 Seat Number : 15 Trip Number : AE-109	P
	2	file that user specifies contains information that is not valid	user inputs: "passenger.txt" File information is as follows: Trip Number: 115 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 12414697 Priority: 8 Drop-Off Point: Mamplasan Toll Exit	Program displays: Trip number provided is not valid! Aborting operation...	Program displays: Trip number provided is not valid! Aborting operation...	P
	3	file that user specifies does not exist	user inputs: "non-existent.txt" file does not exist	Program displays: File with the name non-existent.txt not found!	Program displays: File with the name non-existent.txt not found!	P
	4	file that user specifies has an extension that is not .txt	user inputs: "passenger.rtf"	File extension not supported! This operation only supports .txt files.	File extension not supported! This operation only supports .txt files.	P

Function	#	Description	Sample Input Data	Expected Output	Actual Output	P/F
loadTripFromFile	1	file that user specifies exists	user inputs: "31-03-2025.txt" three passengers are specified in the file as follows: Trip Number: 101 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 124555555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit Trip Number: 102 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 123555555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit Trip Number: 103 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 12255555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit	Program displays: Displaying trip information for 31-03-2025.txt... Trip Number: 101 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 124555555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit Trip Number: 102 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 123555555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit Trip Number: 103 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 12255555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit	Program displays: Displaying trip information for 31-03-2025.txt... Trip Number: 101 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 124555555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit Trip Number: 102 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 123555555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit Trip Number: 103 Embarkation Point: Gate 1: South Gate (LS Building Entrance) Passenger Name: doe, john ID Number: 12255555 Priority: 1 Drop-Off Point: Mamplasan Toll Exit	P
	2	file that user specifies does not exist	user inputs: "48-03-2025.txt"	Program displays: File with the name 48-03-2025.txt not found!	Program displays: File with the name 48-03-2025.txt not found!	P
	3	file that user specifies has an extension that is not .txt	user inputs: "31-03-2025.dat"	Program displays: File extension not supported! This operation only supports .txt files.	Program displays: File extension not supported! This operation only supports .txt files.	P