These are the test cases for the GUI program.

Test Case	Description	Sample Input	Expected Output	
1	Test Add button with no input	Must have a first-name!		
2	Test Add button with no last name input	"ZIHAN",	Must have a last-name!	
3	Test Add button with no number of credit	"ZIHAN", "TAN",	Please type a number for number of credits!	
4	Test Add button without choosing student type	"ZIHAN", "TAN", 9	Please select a student type!	
5	Test Add button for Instate student with no funds	"ZIHAN", "TAN", 9, INSTATE	Added	
6	Test Add button for Instate student with 1000 funds	"Jianyu", "Qiu", 17, INSTATE, 1000	Added	
7	Test Add button for Instate student with 0 credit	"Jianyu", "Qiu", 0, INSTATE	Instate student is invalid!	
8	Test Add button for Instate student with negative credit	"Jianyu", "Qiu", -1, INSTATE	Instate student is invalid!	
9	Test Add button for Instate students with negative funds	"Jianyu", "Qiu", 12, INSTATE, -1	Instate student is invalid!	
10	Test when characters are entered where integers or numeric data are expected	Case1: "Mary", "Yang", "d" Case2: "Mary", "Yang", 8,INSTATE, "t"	case1:Please type a number for number of credits! case2:Please type a number for funds!	
11	Test Add button for Outstate student with negative credit	"Jianyu", "Qiu", -1, OUTSTATE	Outstate student is invalid!	
12	Test Add button for Outstate student with 0 credit	"Jianyu", "Qiu", 0, OUTSTATE	Outstate student is invalid!	
13	Test Add button for Outstate student with Tri-State Student checked	"May", "Anderson", 17, OUTSTATE, Tri-State Student	Added	

14	Test Add button for Outstate student without Tri-State Student checked	"Lauren", "Brown", 5, OUTSTATE	Added	
15	Test Add button for International student with credit less than 9	case1:"Good", "Man", 0, INTERNATIONAL case2:"Good", "Man", -1, INTERNATIONAL case3:"Good", "Man", 8, INTERNATIONAL	case1:International student is invalid! case2:International student is invalid! case3:International student is invalid!	
16	Test Add button for International student with valid credit number and Exchange Student	"Good", "Man", 9, INTERNATIONAL,Ex change Student	Added	
17	Test Add button for International student with valid credit number and not Exchange Student	"Peter", "Parker", 9, INTERNATIONAL	Added	
18	Test Add button when student is already in the list	"Peter", "Parker", 9, INTERNATIONAL	Student already exists!	
19	Test Remove button when student is not in the list/when the list is empty	"Joe", "Kim"	Student not exist	
20	Test Remove button when student is in the list "Peter", "Parker" remove		removed	
21	Test Remove button when no data has been entered, or data is incomplete	en entered, or Case2: "Peter", Case2: Must have a last-name		
22	Test Print button when the list is empty		Empty List!	

23	Test Print button after a few add	Add: "ZIHAN", "TAN", 9, INSTATE,0 Add: "Jianyu", "Qiu", 17, INSTATE,1000	ZIHAN TAN 9 Instate with 0 funds tuition due: \$ 4743 Jianyu Qiu 17 Instate with 1000 funds tuition due: \$ 6936
24	Test disable when when options are not applicable	Case1: check INSTATE button Case2: check OUTSTATE button Case3: check INTERNATIONAL button	Case1:display Funds and can enter funding, cannot choose Tri-State Student or Exchange Student status. Case2: display Tri-State Student, cannot enter funding or choose Exchange Student status. Case3: display Exchange Student, cannot enter funding or choose Tri-State Student status.
25	Test part-time Instate students are not eligible for the funding	Add: "Zihan", "Tan", 8,INSTATE, 1000	Zihan Tan 8 Instate with 1000 funds tuition due: \$ 4310

These are the valid test cases from program2

Testcase	Description	Sample Input	Expected Output
1	Test Print with valid input.	Add: "May", "Anderson", 17, OUTSTATE "Lauren", "Brown", 17, OUTSTATE, Tri-State Student "Peter", "Parker", 8, INSTATE, 0 "Wilson", "Long", 8, INSTATE, 1000 "Simons", "Michael", 8, OUTSTATE "Stiller", "Anderson", 8, OUTSTATE, Tri-State Student "Peter", "Liang", 12, INSTATE, 1000 "Good", "Man", 12, OUTSTATE "John", "White", 12, OUTSTATE, Tri-State Student "David", "Lee", 12, INTERNATIONAL	May Anderson 17 Outstate without discount tuition due: \$ 12781 Lauren Brown 17 Outstate with discount tuition due: \$ 9781 Peter Parker 8 Instate with 0 funds tuition due: \$ 4310 Wilson Long 8 Instate with 1000 funds tuition due: \$ 4310 Simons Michael 8 Outstate without discount tuition due: \$ 6894 Stiller Anderson 8 Outstate with discount tuition due: \$ 6894 Peter Liang 12 Instate with 0

"Joe", "Kim",12, INTERNATIONAL, Exchange Student "Michael", "Chamber",17, INSTATE, 0 "John", "Smith",17, INSTATE,1000 "April", "Young",17, INTERNATIONAL "Mary", "Yang",17, INTERNATIONAL, Exchange Student

funds tuition due: \$ 6637 John Young 12 Instate with 1000 funds tuition due: \$ 5637 Good Man 12 Outstate without discount tuition due: \$ 10513 John White 12 Outstate with discount tuition due: \$8113 David Lee 12 International student tuition due: \$ 13131 Joe Kim 12 International exchange student tuition due: \$ 1791 Michael Chamber 17 Instate with 0 funds tuition due: \$ 7936 John Smith 17 Instate with 1000 funds tuition due: \$ 6936 April Young 17 International student tuition due: \$ 15966 Mary Yang 17 International exchange student tuition due: \$ 1791