Seeded-Defects Log

Team 25: Shiwen Xu, Shuqi Ma, Xuan Zhao, Mingyong Cai, Mingqi Han

Defect No.	Defect	Output Before Seeding	Output After Seeding	Suggested Correction	Severity
1	Program does not check cases for infinite discontinuity that are left negative right positive	The graph for -tan(x) is correct no matter when	The graph for -tan(x) is wrong when x range is set high	Add infinite discontinuity check for left negative right positive	1
2	Once user choose to use their own scale on x, they can never go back to default scale automatically	Unselect the button “activate manual x range”, scale automatically goes back to (-5,5) for the next plotting	Unselect the button “activate manual x range”, scale don’t automatically goes back to (-5,5) for the next plotting	Add resetting functionality for the variable “defscale”	1
3	By placing the cursor on the right most part of the plotting canvas and click, the labeling for y value are not fully shown	Placing the cursor on the right most part of the graph, the value for the local y is shown fully on the left side	Placing the cursor on the right most part of the graph, the value for the local y is partially hidden	Add checkings for the cursor placement, and once found the placement is too close to the right side, change the placement of the label.	2
4	Logarithmic that	Logarithm	Logarithmic	Redesign the	1

	have a manual base number does not work	ic that have a manual base number works and show the correct graph	that have a manual base number does not work	information path for logarithm	
5	Remove the line drawn by mouse does not work immediately	Remove the line drawn by mouse works when the button is pressed	Remove the line drawn by mouse works after pressing the plot button again	Add a listener and function for remove	
6	Program will plot lg(x) graph for ln(x) input, ln(x) graph for lg(x) function.	ln(x) function will show correct ln(x) graph, lg(x) function would show correct lg(x) graph.	ln(x) will show lg(x) graph, lg(x) will show ln(x)	Swap the input(ln(), lg()) when parsing equation	1
7	The popup panel invoked by '+piece' button loses reference	'+piece' button should work after arbitrary amount of clicks	After clicking '+piece' button TWICE, it doesn't work anymore	Put the code that invokes the popup into the button listener	1
8	No check for overlapped intervals of a piecewise	When trying to plot a piecewise	When trying to plot a piecewise function that	Add a check for overlapped intervals	2

	function	function that some pieces have overlapped intervals, multiple graphs are plotted on the overlapped interval	some pieces have overlapped intervals, an error message pops up on 'confirm'		
9	Program does not recognize space in between equation	Application supports users add space in between each equation	Graph will not be plotted if users add space in between equation.	Program checks space and ignores it when parsing the equation	2
10	When user add three functions but only two of the functions are entered	Application will show a message saying "empty input"	Application will not show the message and no graph will be plotted.	Program will check if all the functions added are not empty	1
11	When the user tries to change color of a function	The plotted line should show appropriate color	The graph color didn't change	Program will check the selection box	1
12	When the user tries to mark the x and y value of a point on the line plotted.	Press any point on the line, The coordinate of the point will	There is nothing shown on the graph	Program will check the coordinate at the location where mouse clicked	1

		be shown on the graph			
13	When the value entered by user in “search y using x” is out of the range of the graph	The “ y value out of range” message will pop up	Nothing happens	The program will check the range of the graph and the y-value	2
14	Program does not alert user when the input parenthesis are unbalanced	Application will alert user when parentheses are not balanced in each equation.	Program will not alert user if parentheses are unbalanced.	Check if parentheses are all popped out in the stack. If not, alert unbalanced parenthesis.	2
15	Program does not alert user invalid characters.	Program will alert user if there is invalid characters other than x, π, sqrt()	Program will not alert user if there exists invalid characters.	Check if there are characters other than x, π, sqrt() when parsing the equation.	2
16	Program does not alert user invalid equation. E.g: x+, sinx()	Program will alert user if the equation is missing operands or operators	Program will not alert user if equation is invalid	If equation contains bioperator, check if there are operands on both sides.	2
17	The labeling of y component when searching with x can overlap with y or x axis(or	Program will provide clear labels with no	Program won’t provide clear labels, users are having a hard time	Add checking statement for overlapping labels.	2

	both), make it difficult to see.	overlapping	reading the labels..		
18	Error message is not shown appropriately: when plotting some functions that are not defined on(NegInfi, PosInfi) inherently for example ln(x) an error message is shown, which is wrong.	Program detects the undefined domain, and automatically skip its drawing when it is appropriate	Program always show the error message “function not defined, invalid input”	Delete this error message	1
19	Revising the function already in the panel will show both the graph before and after revision	Graph before revision will be cleaned and only displays the new function’s graph	The graph before revision will remain on the canvas, while the graph will also be displayed	Create a new Arraylist multiple function array every time when plot clicked in the plot listener	1
20	The y value given by the program when use mouse to get an x value is wrong(checking this simply use y=x and look for when x=1)	The y value output should be 1 when use function y = x and choose x = 1	The y value output is 0.99375 when use function y = x and choose x = 1 (assuming default scale) (assuming piecewise function)	Choose the centerpoint ‘s value of a pixel instead of the left edge value for x	1
21	The y value is not shown when input an x value	The y value for a given x is	The y value for a given x is not shown	Add checking functions for piecewise	1

	for a piecewise function	shown no matter what	when the function is piecewise	functions and and add plotpoint functionality	
22	Revising the applied piecewise Interval already in the panel will not rewrite the old interval	New interval will rewrite the old one and a new graph will be displayed for that function	New interval will not be applied to the function, graph will be displayed with the old interval	Create new Arraylist for multiple interval every time in “plot” button listener	1
23	When removing one function, but forgot to delete completely, the function still remains on the graph.	When delete the function, even if the slot is not removed, deleted function disappears	When delete the function, even if the slot is not removed, deleted function stays	Add checking for blank entries and inform plotter to unplot it	1
24	No support for empty input field	When an input field is left empty, the parser will ignore it	When an input field is left empty, other expressions can’t be plotted either	The parser should take care of this issue	2
25	Confirm button can’t be reached when there are too many pieces	Confirm button can always be reached because the ‘+piece’ panel has a scroll bar	When too many pieces are added to ‘+piece’ panel, the confirm button hides into the bottom of the panel and	Wrap the ‘+piece’ panel into a scroll bar panel object	1

			can’t be reached anymore		