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1.　First of all, I input a, b for the given function, and set the condition of a, b=0 to return. Then I ask user to input step size of x, dx. (dx must be greater than 0). Finally, I set the mathematic formula, plot it, set the font size of the label of axis, call **hold on** so that more functions can be plotted in the same figure, and set the figure on top by calling **figure(1)** after a curve is drawn.

2.　First, I input c for the given function, and set the condition of c<0 to return, and I ask user to input step size of x, dx equals to 0.001 so that all the curve is smooth. Then, I use the root formula for quadratic equation due to the fact that it is an implicit function. After that, I plot the two root functions for b inside {0, 2, 4, …, 100}, set the axis range, and set the figure on top by calling **figure(1)** after a curve is drawn.

3.　First, I ask user to input an integer m (It's necessary to check if m is valid), and set the condition of m=0 to return. Then, I write a loop to implement a family of function for n in [0, m], using **symsum** to calculate the sum of series y2(x, n), and plot the functions y1 and y2 in the same figure with different colors and linewidth (so I use **hold on**).　After that, I set the axis range, and set the figure on top by calling **figure(1)** after a curve is drawn.

4.　First, I ask user to input a real number d in the interval [0, 1] (d cannot be 0) and set the condition of m=0 to return. Then, I write a loop to implement the family of function y1 and y2 for c in [-4:0.05:4], using **pause(0.1)** to display the animation of it, and plot the functions y = y1/y2 in the figure.　After that, I divide the figure into 4 segments by those points on x-axis which do not exist(Use **find()** to find the corresponding condition of x=-c, x=-5, x=5). Finally, set the step size of x to make sure that my segments are smooth and set the y-axis range(use **ylim**).

5.　First of all, I read my .png file and resize the image to 320x320 and transfer it to double so that I could make some changes easier.　Then, I ask user to input option.　　If option is 0, show info of student. If option is 1 to 4, the image would have a line which sweeps across it (There are 4 directions to implement). I only finish options 0 to 2.　For example, I use a while-loop in option 1 to set R, G, B of one column to be 0 and restore to older setting next time cycle. (set the cycle time by **pause(0.0001)**)