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EECS 161 R1000

Assignment 3

16 February 2014

1. **Understanding the Problem**
   1. The problem is asking for the area under 1 of 5 curves selected by the user. The method for finding these areas is simply integration using both the rectangle method and the trapezoid method. The user is prompted for the variables involved in these calculations such as the number of rectangles/trapezoids, starting point, ending point, and which equation is desired for integration.
2. **Devising a Plan/Design**
   1. Prompt the user to input which function he/she wants to be integrated
   2. Prompt user to input rectangle or trapezoid or both methods
   3. Prompt user for starting point and ending point
   4. Prompt user for number of rectangles or trapezoids
   5. Make a void function for each of these possible situations
      1. Rectangle for function 1
      2. Trapezoid for function 1
      3. Rectangle for function 2
      4. Trapezoid for function 2
      5. Rectangle for function 3
      6. Trapezoid for function 3
      7. Rectangle for function 4
      8. Trapezoid for function 4
      9. Rectangle for function 5
      10. Trapezoid for function 5
3. **Looking Back/Self-Reflection**
   1. Looking back, I find that I could have made the code much more readable for myself during my initial attempts on the assignment. Including a couple more comments would have been nice as well.
   2. From this assignment, I learned how to define and call void functions. I also learned how to utilize while loops in my code.
   3. One of the more important things I learned from this assignment is how to take variables from one functions and use them in another function
4. **Design for Assignment #4**
   1. Since most of the variables I asked for were all at different points of time and different functions during the program, having all the input at once would create much convenience for the user, but would require me to restructure my entire program to fit this new standard.