Suggested steps for implementing PA#2

1. Copy the function prototypes and two functions from instructions into your program. Comment out prototypes of functions not yet defined.
2. In main, set up your menu loop. See menu.cpp for a suggested pattern (but call the displayMenu function). Set up your switch to output a statement for each case for now.
3. If a wrong choice is entered, output: "Please enter 1, 2, 3, 4, or 5: “
4. Declare the Result struct
5. Define the **displayDataset** function (call displayHeader, etc.)
6. In main:
   • create an array of Result.
   • initialize it to the first three race results in the dataset (remove before step 10).
   • have a count variable, set to 3.
   • call displayDataset from cases 1 and 2 of the switch, make sure it displays properly.
   (you could skip ahead to step 10 now if you prefer)
8. Define **linearSearchByName**
   • call it from case 3 of the switch
   • you will need to input the name from the user using getline(cin, variable). But you will need to do cin.ignore, or cin >> ws; before the getline.

9. Define **sortByNumber**
   • call it from case 1 of the switch

10. Define **readDataset** function:

    • copy dataset.txt to your directory.
    • in main:
        - create an ifstream variable for dataset.txt (include fstream) and open it in main!!
        - call readDataset from main before the display (set count to 0 first)
        - hint: temporarily output each result from readDataset to find any problems
        - ctrl-C if infinite loop.

11. implement **sortByDistanceTime**
    - call it from case 2 of the switch
12. implement **binarySearchByNumber**
    - call it from case 4 of the switch