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|-----------------------------|------------|--|---|
| PROGRAM 4 DONUTS | | NAME: | |
| | 10 | Compiles / Syntax Errors | |
| | 10 | <input type="checkbox"/> Compiles with no errors – 10 points <input type="checkbox"/> Does not compile – 0 points | |
| | 80 | Follows Program Algorithm & Specifications | |
| | | 10 | <input type="checkbox"/> The program was implemented in 5 files as specified: donut.cpp donut.h functions.cpp arrayFunctions.cpp arrayHeader.h |
| | | 5 | <input type="checkbox"/> Program does not contain any global variables <input type="checkbox"/> Function prototypes are correct. |
| | | 15 | Main Function / Algorithm: <ul style="list-style-type: none"> <input type="checkbox"/> Variables defined properly <input type="checkbox"/> Program asks how many students surveyed <input type="checkbox"/> Program calls makeArray function three times to dynamically allocate three arrays <input type="checkbox"/> enterData function called <input type="checkbox"/> getLargest function called <input type="checkbox"/> getSmalles function called <input type="checkbox"/> getTotal function called <input type="checkbox"/> average number of donuts eaten by all calculated <input type="checkbox"/> getMode function called for location <input type="checkbox"/> getMonde function called for type of donut <input type="checkbox"/> results are printed in a nice format and contain the same information as in the sample output <input type="checkbox"/> Deletes dynamically allocated arrays |
| | | 15 | enterData() function: <ul style="list-style-type: none"> <input type="checkbox"/> accepts a pointer to three different arrays and the size of the array <input type="checkbox"/> ask user for information and enter all the information into the appropriate array <input type="checkbox"/> user validation for number eaten (no negative numbers, no chars/strings) <input type="checkbox"/> user validation for place (1 – 5, no chars/strings) <input type="checkbox"/> user validation for type (1 – 6, no chars/strings) <input type="checkbox"/> used pointer notation |
| | | 35 | ARRAY functions <ul style="list-style-type: none"> <input type="checkbox"/> makeArray parameter – size of array dynamically allocates integer array returns pointer to array <input type="checkbox"/> getLargest in pointer notation accepts pointer to array and size finds largest number in array & returns it <input type="checkbox"/> getSmallest in pointer notation accepts pointer to array and size finds smallest number in array & returns it <input type="checkbox"/> getTotal in pointer notation accepts pointer to array and size finds total of all array elements & returns it <input type="checkbox"/> getMode in pointer notation accepts pointer to array and size finds mode of of array & returns it unless there is no mode, then it returns -1 |
| | 10 | Readability of Code | |
| | | 4 | <input type="checkbox"/> Comment block at top containing title of program, date, author, and purpose in ALL FIVE FILES. |
| | | 6 | <input type="checkbox"/> A comment block above each function prototype in the header file containing the function purpose, pre-conditions, and post-conditions |
| | 100 | TOTAL (FINAL) GRADE | |