

**AP Computer Science
Searching / Sorting Project**

Question	Possible Points	Your Points	Comments
1. Description Slide			
A correct qualitative description for the given searching and/or sorting routine	5	5	
A "Line-by-Line Comparison Chart" is presented	5	5	
The logic for the "Line-by-Line Comparison Chart" is presented correctly	10	10	
2. Role Play Slide			
Each student correctly demonstrates the role play with 2 or fewer mistakes	10	10	
Each student correctly demonstrates the role play with 1 or fewer mistakes	10	10	
Each student correctly demonstrates the role play with ZERO mistakes	10	10	
3. Java Code Demo Slide			
Program includes a best-case scenario simulation	5	5	
Program includes a worst-case scenario simulation	5	5	
Program includes a timing mechanism using System.currentTimeMillis() method	5	5	
The code for the search and/or sort is explained qualitatively	5	5	
4. Big-O Slide			
A definition of what Big-O measures is correctly presented	10	10	
A best-case Big-O is presented with an qualitative explanation of how the Big-O gives an approximate run-time speed (i.e. "as the number of elements in the array is increased, the search and/or sort time ...")	5	5	
A best-case Big-O is presented with an qualitative explanation of how the Big-O gives an approximate run-time speed.	5	5	
5. Advantages/Disadvantages Slide			
Advantages of searching and/or sorting routine is presented	10	10	
Disdvantages of searching and/or sorting routine is presented	10	10	
6. Memory Issues Slide			
Memory Issues for the given searching/sorting routine is presented	20	20	
Totals	110	110	