**Computer Programming**

**Experiment 6: Structures & Large Program Design (Chapter 8)**

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| **Class:** |  |
| **ID:** |  |
| **Name:** |  |

1. **Goal**

* Understand structures in C
* Grasp the declaration, initialization, and use of a structure
* Understand the use of a structure with pointers/functions/arrays
* Grasp bitwise manipulations

1. **Requirements**

Please finish your experiment independently. You could use Integrated Development Evironments (IDE), such as CodeBlocks, Microsoft Visual C++, gcc, and Apple XCode. Write out a full program, fix any bugs, and make sure your code is runnable.

1. **Contents**
2. Page 521-1: Please manually calculate the results using bitwise operators, and then make a program to verify your results.
3. Page 521: Application Program 8.1: Sorting – Quicksort Algorithm.
4. **Results & Analysis**

Please describe the IDE you used, list the source code of your program, present your input and output, and analyze your results and the issues you encounter.

(Do not change the above contents. Please provide your answers below.)