CSC 204: Assignment 1

Answer each question in a few sentences only. Submit in print (not handwritten) in class; no emails

1. What is the difference between computer architecture and computer organization? (This is problem 1.3 from page 23 in the textbook)

2. A Rolls Royce is not a Volkswagen Beetle. Is the difference a matter of architecture or organization? (This is problem 1.4 from page 23 in the textbook)

3. In a von Neumann machine, programs and data share the same memory. The operation "get [4]" reads the contents of memory location number 4 and you can then operate on the number you've just read from this location. However, the contents of this location may not be a number. It may be an instruction itself. Consequently, a program in a von Neumann machine can modify itself. Can you think of any implications this statement has for computing? (This is problem 1.13 from page 24 in the textbook)