**CMPS 10 WINTER 2012**

**PRACTICE PROBLEMS FOR BINARY ARITHMETIC. BASE CONVERSION. SORTING AND COMPUTATIONAL COMPLEXITY.**

1. Convert 10 Base 10 to Base 2
2. Convert 16 Base 10 to Base 2
3. Convert 32 Base 10 to Base 2
4. Convert 230 Base 10 to Base 2
5. Add 16 in Base 2 to 32 in Base 2. What is the answer?
6. How is computational complexity measured in time?
7. What is the computational complexity of Bubble Sort?
8. What is the computational complexity of Quick Sort?
9. Name a computational problem for which there is no known polynomial time algorithm?