CS 365   `
Questions Related to Presentations

1. **Logic Puzzles:** What are logic puzzles? What is the "Knights and Knaves" puzzle? How does solving logic puzzles relate to this class?

2. **Fuzzy Logic:** What is fuzzy logic? How is it different from propositional/predicate logic? What are some key applications of fuzzy logic?

3. **Logic Programming and Prolog:** What is logic programming? How is Prolog different from other programming languages (e.g., C or C++)? What are some key applications of logic programming?

4. **Chaos and Its Computing Paradigm:** What are the main properties of a chaotic system? How is a chaotic system different from a probabilistic system? What advantages does it offer using chaos as a computing paradigm?

5. **Can You Trust your Computer?:** How could numerical precision affect your computations? How can we avoid errors due to limited numerical precision? Why is it important to know the machine constant of a computer before doing any serious computations?

6. **Software as Math:** How does an algebraic specification relate to programming? What is a homomorphism between two specifications? Give an example of homomorphism between two different data structures. Why is it useful to know that there exist a homomorphism between two data structures?

7. **Automated Reasoning:** What is automated reasoning? Describe two applications of automated reasoning.

8. **Probabilistic Spam Filters:** What is a probabilistic spam filter? How does a probabilistic filter work? What information would you need to collect in order to build a probabilistic spam filter?

9. **Program Correctness:** What is program correctness? What is the difference between total and partial correctness?