*Session 1: Mathematical Foundations agenda*

*This session will be covering the following topics*

*in the agenda*

*● Number Systems and Set Theory*

*● Logic and Boolean Algebra*

*● Exponents and Logarithms*

*● Probability*

*● Differences Between n, log n and e^n*

*Session 1: Mathematical Foundations in Computer Science*

*1. Welcome and Introduction (10 mins)*

*- Overview of workshop goals.*

*- Speaker introduction.*

*- Icebreaker activity.*

*2. Number Systems and Set Theory (20 mins)*

*- Explore binary, octal, hexadecimal.*

*- Introduce set theory.*

*- Cover basic set operations.*

*3. Logic and Boolean Algebra (15 mins)*

*- Overview of logic gates.*

*- Basic logic operations (AND, OR, NOT).*

*4. Exponents and Logarithms (20 mins)*

*- Properties of exponentiation.*

*- Introduction to logarithms.*

*- Connection between exponents and logarithms.*

*5. Probability in Computer Science (15 mins)*

*- Probability concepts.*

*- Basic probability rules.*

*6. Differences Between n ,log n and e^n (20 mins)*

*- Growth rates understanding.*

*- Comparison of time complexities.*

*- Practical examples in computer science.*

*7. Hands-On Problem Solving Exercise (15 mins)*

*- Apply concepts in problem-solving.*

*- Q&A session.*

*8. Closing Remarks and Resources (5 mins)*

*- Summary of key concepts.*

*- Recommendations for further learning.*

*- Thanking participants and encouraging questions.*