IC Lab Formal Verification  
Lab11 Quick Test

2023 Fall

**Name: Student ID: Account: y**

1. What is Formal verification?

What's the difference between **Formal** and **Pattern** based verification?

And list the pros and cons for each.

1. What is glue logic?

Why will we use **glue logic** to simplify our SVA expression?

1. What is the difference between **Functional coverage** and **Code coverage**?

What’s the meaning of 100% code coverage, could we claim that our assertion is well enough for verification? Why?

1. What is the difference between **COI coverage** and **proof coverage** for realizing checker’s completeness? Try to explain from the meaning, relationship, and tool effort perspective.
2. What are the roles of **ABVIP** and **scoreboard** separately?

Try to explain the definition, objective, and the benefit.

1. List four **bugs** in Lab Exercise

What is the answer of the Lab Exercise?

1. Among the JasperGold tools (Formal Verification, SuperLint, Jasper CDC, IMC Coverage), which one have you found to be the most effective in your verification process? Please describe a specific scenario where you applied this tool, detailing how it benefited your workflow and any challenge you encountered while using it.