

# Organization of Digital Computer Lab

## EECS112L/CSE 132L

### **Assignment 1**

#### **Working with CAD tools**

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January, 6, 2016

## **1 What I've learned**

### **1.1 QuestaSim**

- Questasim can only be used on zuma or crystalcove Unix servers
- How to setup a project that uses Questasim
- Install Questasim for my use on the server for the project
- Compile the VHDL(.vhd) design files and the System Verilog(.sv) testbench files
- Optimize the VHDL design
- Simulate the design
- View the waveform

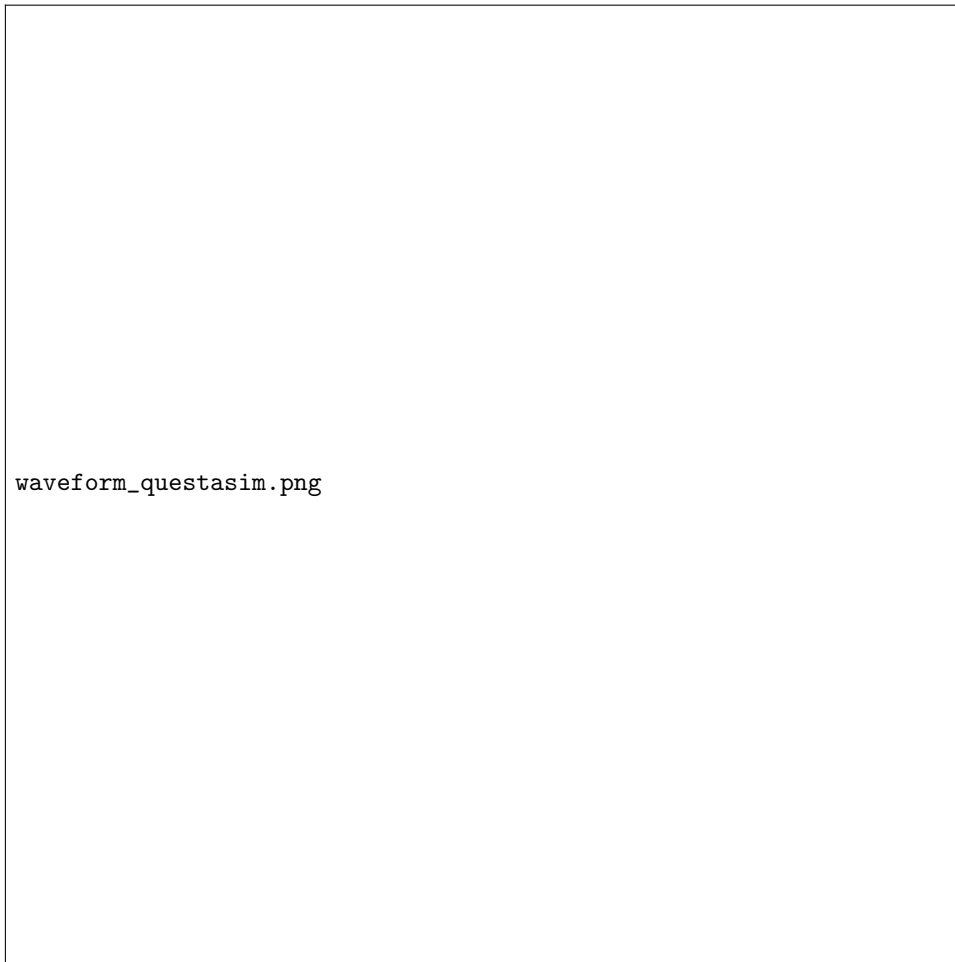
### **1.2 Cadence**

- Cadence can only be used on malibu or vivian Unix servers
- Enable Cadence for use on my account
- How to setup a project that uses Cadence
- Compile the VHDL(.vhd) design files and the System Verilog(.sv) testbench files
- Elaborate the VHDL design
- Simulate the design
- View the waveform

## 2 MentorGraphics QuestaSim toolset

### 2.1 Simulation waveform


Simulation Waveform is as follows:



## 3 Cadence Incisive toolset

### 3.1 Simulation waveform

Simulation Waveform is as follows:



waveform\_cadence.png

## 4 Conclusion

I would prefer to use MentorGraphics QuestaSim toolset for the 112L course and because I found the compiling and optimization of the code to be easier and the display of the waveform more intuitive.