



Course Number	COE608
Course Title	Computer Organization and Architecture
semester/year	Winter 2023
Instructor	Demetres Kostas
TA Name	Tasnim Prova

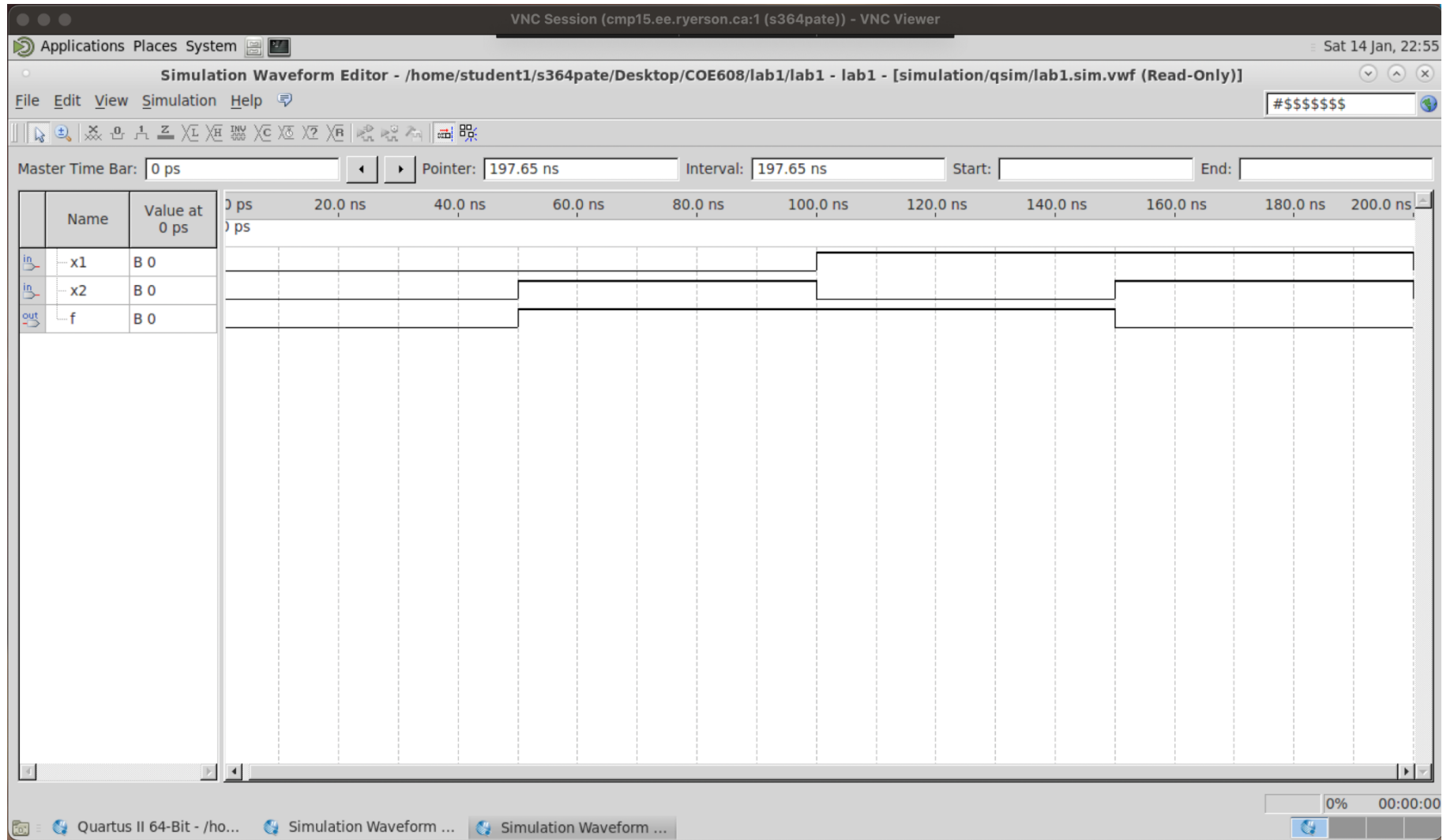
Lab report No.	1
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Report Title	Introduction to Quartus-II by a VHDL Based Design
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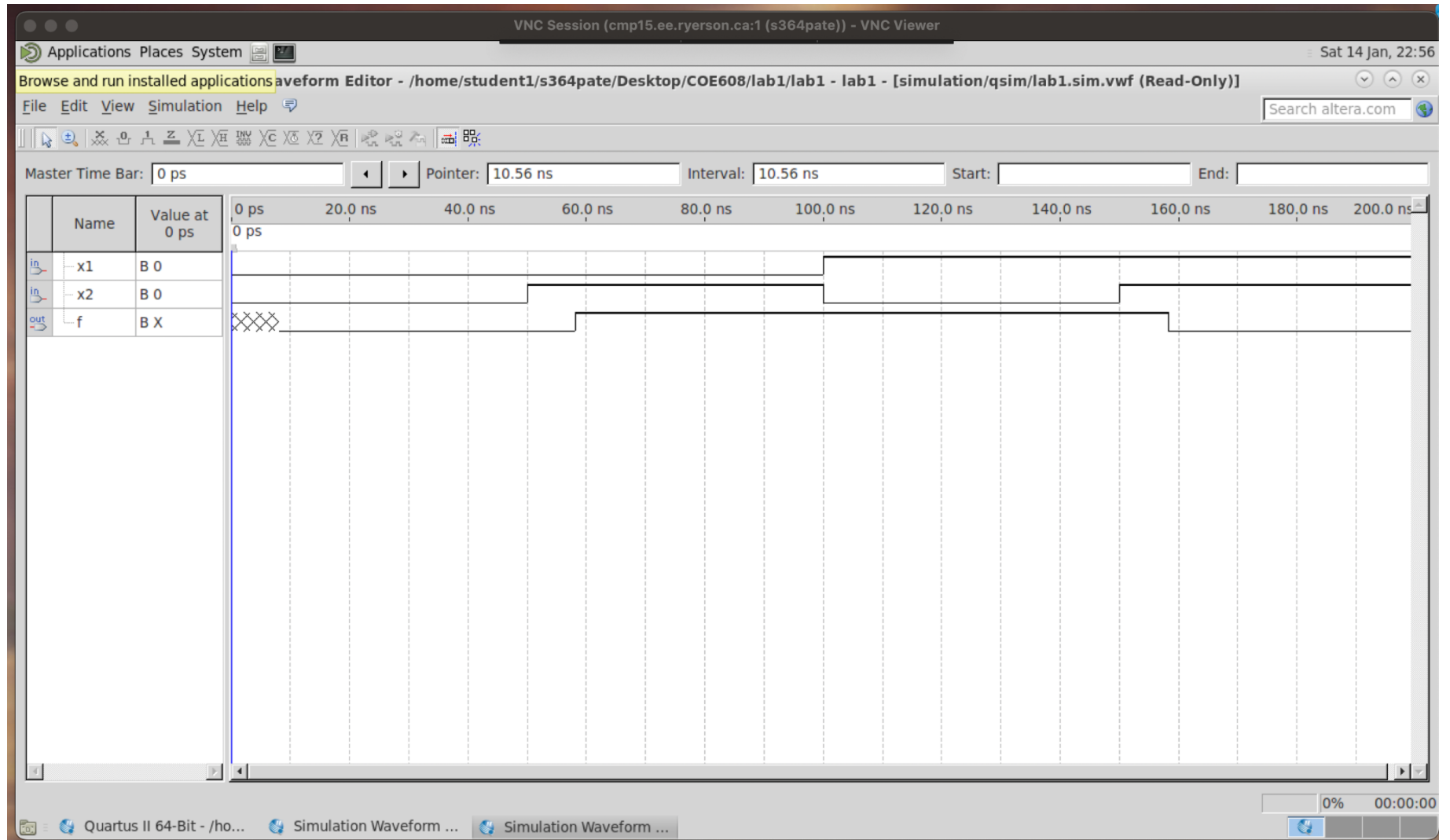
Section number	04
Submission date	
Due date	January 20 2023

Student Name	Student ID	Signature/Initials
Stuti Patel		SP

## Functional Diagram



## Time Functional Diagram



VNC Session (cmp15.ee.ryerson.ca:1 (s364pate)) - VNC Viewer

Sat 14 Jan, 22:56

Quartus II 64-Bit - /home/student1/s364pate/Desktop/COE608/lab1/lab1 - lab1

File Edit View Project Assignments Processing Tools Window Help

Search altera.com

lab1

Project Navigator

Files

- light.vhd
- Block1.bdf

Hierarchy Files Des

Tasks

Flow: Full Design Customize...

Task

- Assembler (Generate)
- TimeQuest Timing Analysis
- EDA Netlist Writer
- Program Device (Open Project)
- Verify Design
- Simulate Design

light.vhd\*

```
1 library ieee;
2 use ieee.std_logic_1164.all;
3 entity light is
4 port (
5     x1, x2 : in std_logic;
6     f       : out std_logic
7 );
8 end light;
9
10 architecture Behavior of light is
11 begin
12     f <= (x1 and not x2) or (not x1 and x2);
13 end Behavior;
```

Compilation Report - lab1

Block1.bdf

Messages

All <<Search>>

Type	ID	Message
Information	204019	Generated file lab1_min_1200mv_0c_fast.vho in folder "/home/student1/s364pate/Desktop/COE608/lab1/simulation/modelsim/" for EDA simulation tool
Information	204019	Generated file lab1.vho in folder "/home/student1/s364pate/Desktop/COE608/lab1/simulation/modelsim/" for EDA simulation tool
Information	204019	Generated file lab1_7_1200mv_85c_vhd_slow.sdo in folder "/home/student1/s364pate/Desktop/COE608/lab1/simulation/modelsim/" for EDA simulation tool
Information	204019	Generated file lab1_7_1200mv_0c_vhd_slow.sdo in folder "/home/student1/s364pate/Desktop/COE608/lab1/simulation/modelsim/" for EDA simulation tool
Information	204019	Generated file lab1_min_1200mv_0c_vhd_fast.sdo in folder "/home/student1/s364pate/Desktop/COE608/lab1/simulation/modelsim/" for EDA simulation tool
Information	204019	Generated file lab1_vhd.sdo in folder "/home/student1/s364pate/Desktop/COE608/lab1/simulation/modelsim/" for EDA simulation tool
Information		Quartus II 64-Bit EDA Netlist Writer was successful. 0 errors, 0 warnings
Information	293000	Quartus II Full Compilation was successful. 0 errors, 8 warnings

System (5) Processing (126)

Ln 12 Col 45 VHDL File 100% 00:00:40

Quartus II 64-Bit - /ho...

VNC Session (cmp15.ee.ryerson.ca:1 (s364pate)) - VNC Viewer

Sat 14 Jan, 22:56

Applications Places System

Browse and run installed applications

Quartus II 64-Bit - /home/student1/s364pate/Desktop/COE608/lab1/lab1 - lab1

File Edit View Project Assignments Processing Tools Window Help

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light.vhd\*

Compilation Report - lab1

Block1.bdf

Diagram showing logic components: AND2, OR2, NOT, and a SWITCH component.

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System (5) Processing (126)

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