

DAILY ASSESSMENT FORMAT

Date:	03/06/2020	Name:	Nishanth
Course:	DIGITAL DESIGN USING HDL	USN:	4a117ec063
Topic:	<ol style="list-style-type: none"> 1. EDA Playground Tutorial Demo Video 2. How to Download And Install Xilinx Vivado Design Suite 3. Vivado Design Suite for implementation of HDL code 	Semester & Section:	6thb-section
GitHub Repository:	nishanthvr		

FORENOON SESSION DETAILS

Image of session:

The screenshot displays the EDA Playground web interface. On the left, there is a sidebar with 'Languages & Libraries' and 'Tools & Simulators' sections. The main area shows two code editors: 'testbench.sv' and 'design.sv'. The 'testbench.sv' editor contains a Verilog testbench for an inverter, including a timescale, module declaration, signal declarations, and an initial block with a display statement. The 'design.sv' editor contains a simple Verilog module for an inverter. Below the code editors, there is a terminal window showing the command 'iverilog -Wall design.sv testbench.sv && unbuffer vvp a.out' and its output, which includes a warning about missing timescale and the module declaration.

```

// Code your testbench here
// or browse Examples
timescale 1ns / 1ps

module testbench();

    reg a1;
    wire y1;
    inverter inv1(y1,a1);

    initial begin
        a1 = 1'b1;
        $display("a=%b",a1);
        #1
        $display("y=%b",y1);
    end

endmodule

```

```

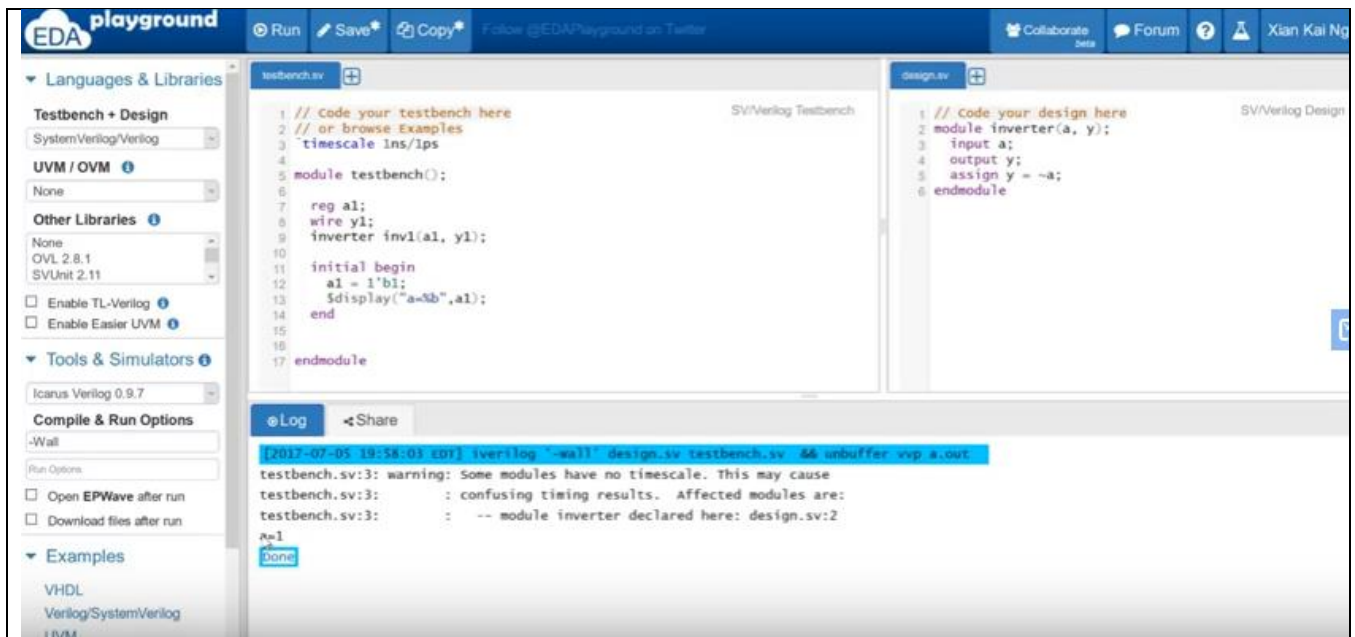
// Code your design here
module inverter(y, a);
    output y;
    input a;
    assign y = ~a;
endmodule

```

```

[2017-07-05 19:49:11 EDT] iverilog -Wall design.sv testbench.sv && unbuffer vvp a.out
testbench.sv:3: warning: Some modules have no timescale. This may cause
testbench.sv:3:      : confusing timing results. Affected modules are:
testbench.sv:3:      : -- module inverter declared here: design.sv:2
a=1

```



4:1 mux in structure modeling style:

```
module and_gate(output a, input b, c, d);
assign a = b & c & d;
endmodule
```

```
module not_gate(output f, input e);
assign e = ~ f;
endmodule
```

```
module or_gate(output l, input m, n, o, p);
assign l = m | n | o | p;
endmodule
```

```
module m41(out, a, b, c, d, s0, s1);
output out;
input a, b, c, d, s0, s1;
wire s0bar, s1bar, T1, T2, T3;
not_gate u1(s1bar, s1);
not_gate u2(s0bar, s0);
and_gate u3(T1, a, s0bar, s1bar);
and_gate u4(T2, b, s0, s1bar);
and_gate u5(T3, c, s0bar, s1);
and_gate u6(T4, d, s0, s1);
or_gate u7(out, T1, T2, T3, T4);
endmodule
```

code for 2:1 mux in structural style.

```
module and_gate(output a, input b, c);
assign a = b & c;
endmodule
```

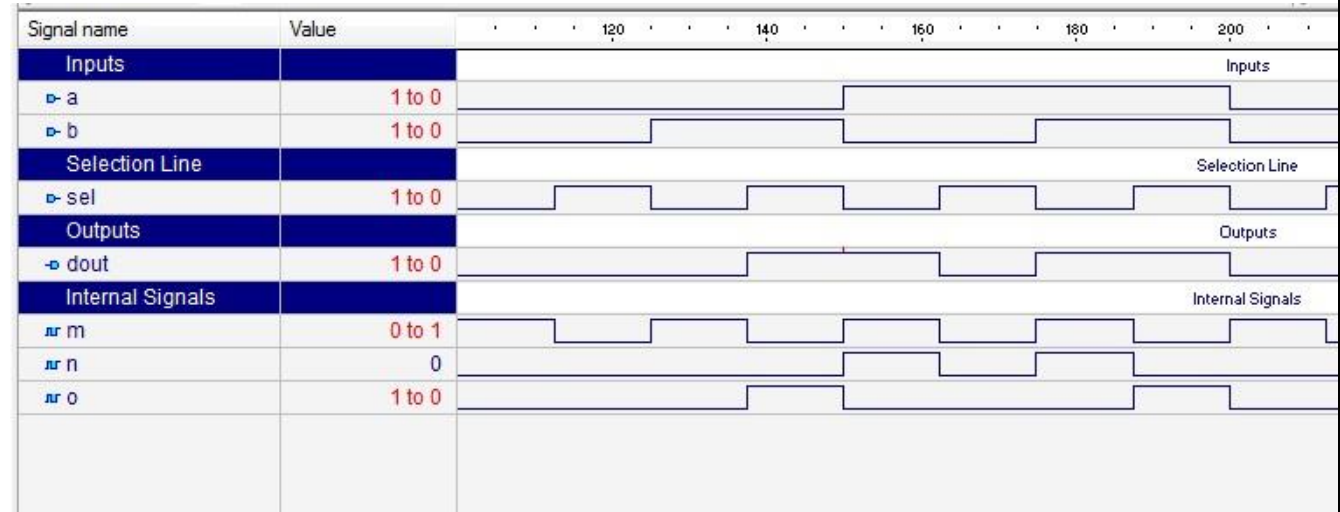
```
module not_gate(output d, input e);
assign d = ~ e;
endmodule
```

```
module or_gate(output l, input m, n);
assign l = m | n;
endmodule
```

```

module m21(Y, D0, D1, S);
output Y;
input D0, D1, S;
wire T1, T2, T3;
and_gate u1(T1, D1, S);
not_gate u2(T2, S);
and_gate u3(T3, D0, T2);
or_gate u4(Y, T1, T3);
endmodule

```



Date: 02/06/2020

Course: Python

1. Application 8: Build a Web-based Financial Graph

Name:

USN:

Semester & Section:

Nishanth

4a17ec063

6th and b section

AFTERNOON SESSION DETAILS

Image of session

The screenshot shows a Udemy course page for 'The Python Mega Course: Build 10 Real World Applications'. The video player displays a web application for 'Century 21 Real Estate' with a search bar for 'Rock Springs, WY'. The course content list on the right includes:

- 240. Loading the Webpage in Python (7min)
- 241. Extracting "div" Tags (12min)
- 242. Extracting Addresses and Property Details (15min)
- 243. Extracting Elements without Unique Identifiers (12min)
- 244. Saving the Extracted Data in CSV Files (8min)

Application 7:

Python program to extract details and plots and store csv files using pandas library

A web-based application is any program accessed over a network that runs in a web browser and the browser supporting the programming language such as the combination of JavaScript, Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) are used for the creation of web-based applications. HTML is the communication standard used by the World Wide Web and a protocol that enables a web browser to retrieve text, graphics, sound and other information from a web server. CSS is a style sheet language used for describing the presentation (look) and formatting of a document or web pages, including colors, layout, and fonts written in a markup language. Python programming language is used for web scraping. Web scraping is described as extracting and processing large amounts of data from the websites using programs or algorithms while using Python is a skill which can be used to extract the data into a useful form that can be imported and the main reason for preferring Python is Scrapy and BeautifulSoup, the most widely used and preferred frameworks; Python library is designed for fast and highly efficient data extraction.