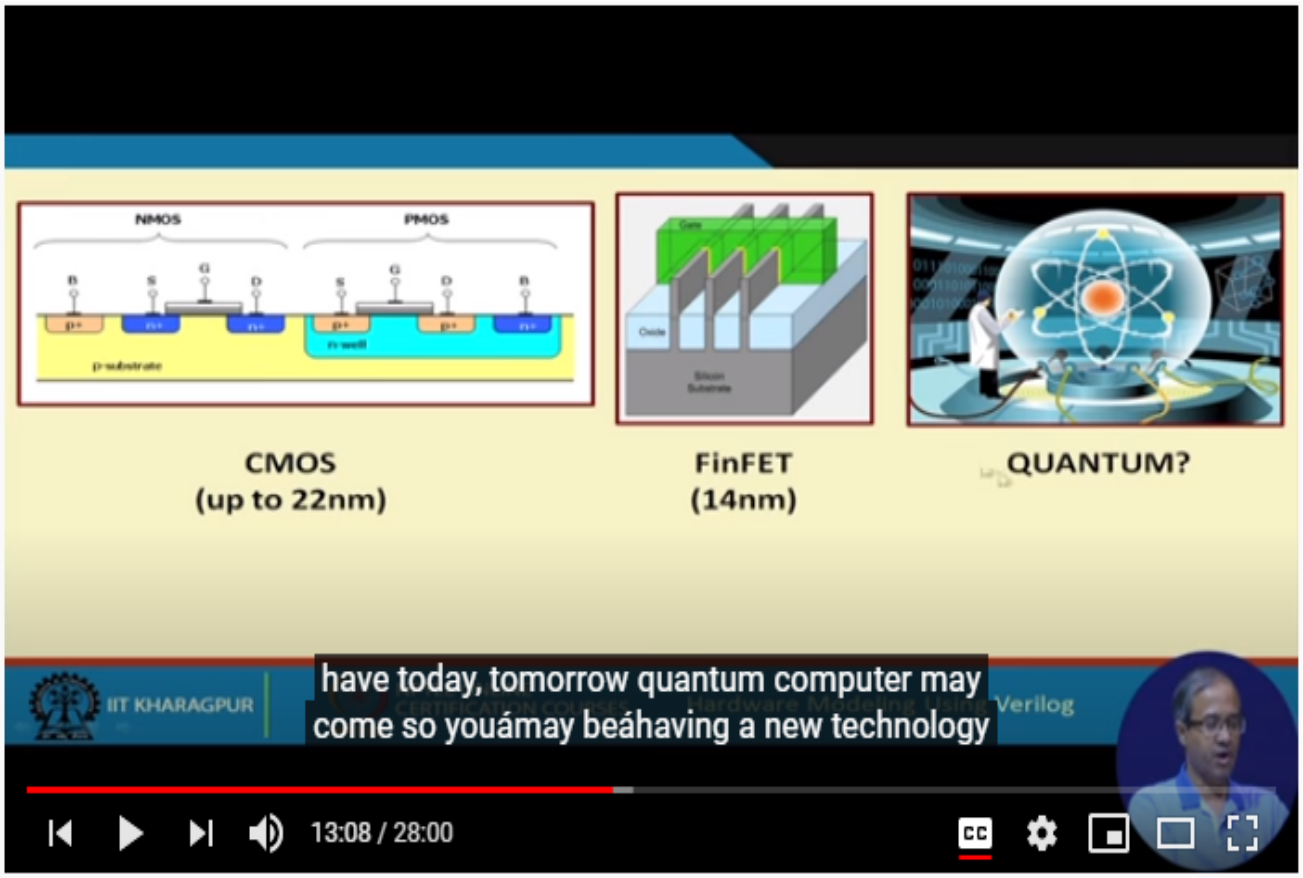
DAILY ASSESSMENT FORMAT

Date:	4/06/2020	Name:	Akshatha M Deshpande
Course:	DIGITAL DESIGN USING HDL	USN:	4AL17EC006
Topic:	Hardware modelling using verilog,FPGA and ASIC Interview questions	Semester & Section:	6th Sem A sec
Github Repository:	AkshathaDeshpande		

FORENOON SESSION DETAILS
Image of session



Report – Report can be typed or hand written for up to two pages.

VLSI DESIGN FLOW:

1. Standardized design Procedure.

2. Starting from the design idea down to the actual implementation.

3. Encompasses many steps:

- Specification
- Synthesis
- Simulation
- Layout
- Test ability Analysis

VLSI DESIGN PROCESS:

1. Design Complexity increasing rapidly:

- Increased size and complexity
- Fabrication Technology improving
- CAD tools are essential
- Conflicting requirements like area, speed and energy consumption.

2. The present trend:

- Standardize the design flow
- Emphasis on low power design, and increased performance.

Implement a simple T Flipflop and test the module using a compiler:

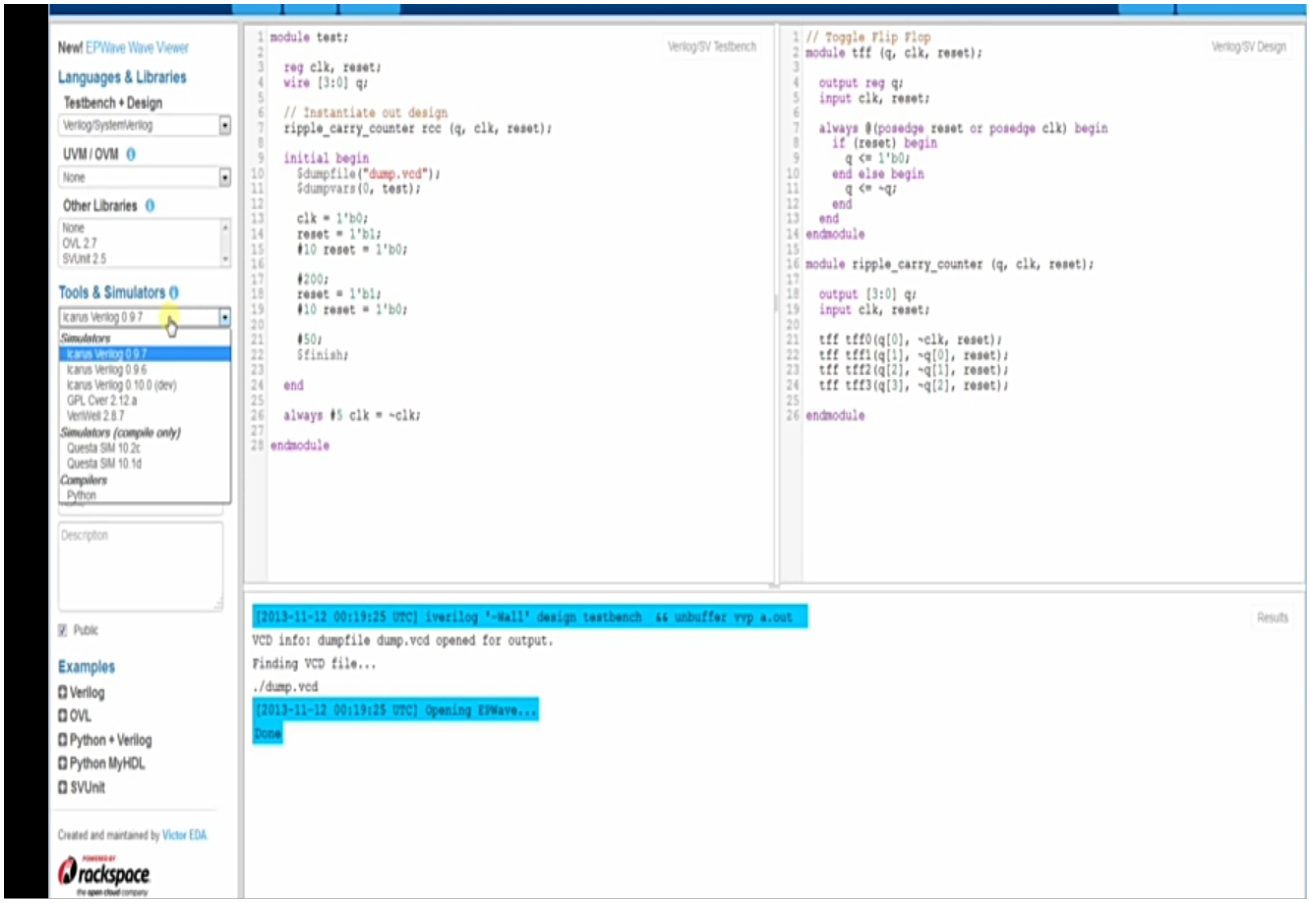
```
module tff ( input clk,
input rstn,
input t,
output reg q);
always @ (posedge clk) begin
if (!rstn)
q <= 0;
else
if (t)
q <= ~q;
else
q <= q;
end
endmodule
```

Test bench:

```
module tb;

reg clk;

reg rstn;

reg t;

 tff u0 ( .clk(clk),

 .rstn(rstn),

 .t(t),

 .q(q));

always #5 clk = ~clk;

initial begin

 {rstn, clk, t} <= 0;
```

```
$monitor ("T=%0t rstn=%0b t=%0d q=%0d", $time, rstn, t, q);
repeat(2) @(posedge clk);
rstn <= 1;
for (integer i = 0; i < 20; i = i+1)
begin
reg [4:0] dly = $random;
#(dly) t <= $random;
end
#20 $finish;
end
endmodule
```

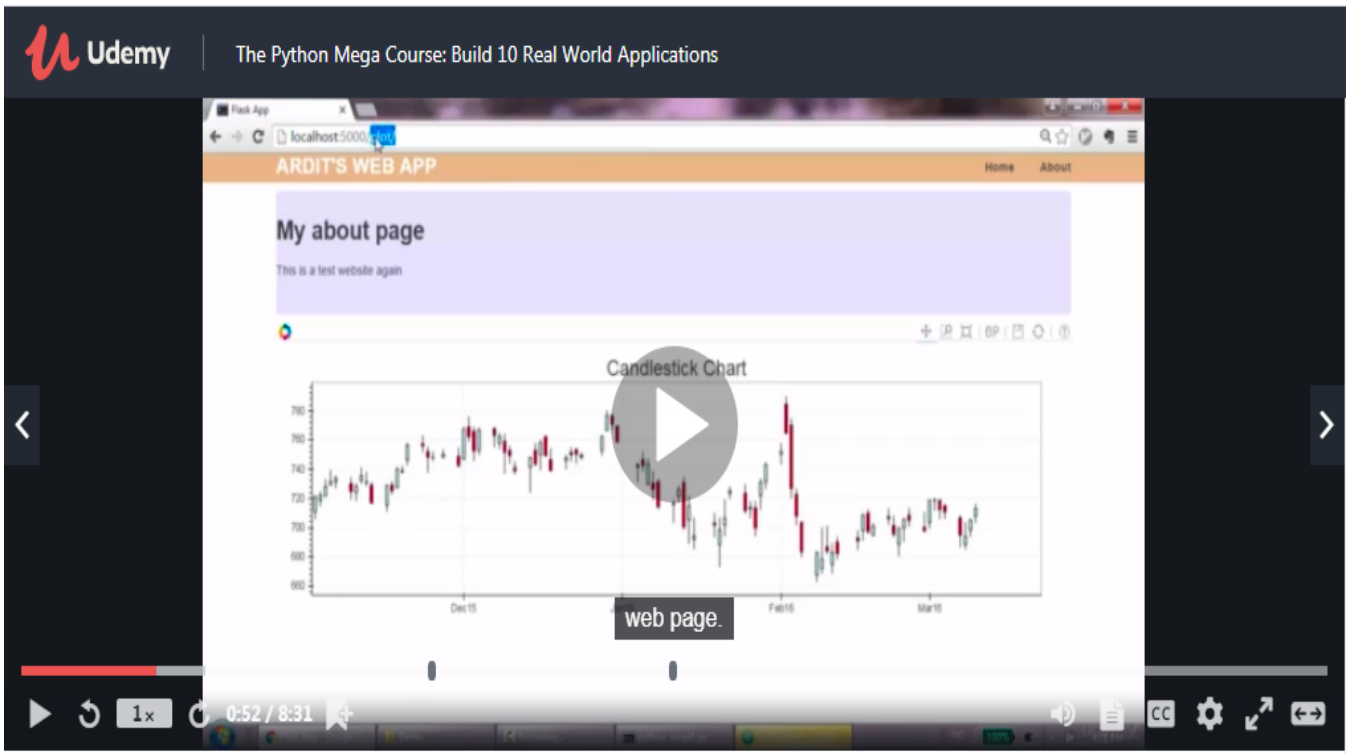
Picture:



Date:	4/06/2020	Name:	Akshatha M Deshpande
Course:	Python	USN:	4AL17EC006
Topic:	Application 9: Build a Web-based Financial Graph	Semester & Section:	6th Sem A sec

AFTERNOON SESSION DETAILS

Image of session



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Application 9: Build a Web-based Financial Graph:

- Web-based Financial Graph - How The Output Will Look Like
- Downloading Datasets with Python
- Stock Market Data
- Stock Market Data Candlestick Charts
- Candlestick Charts with Bokeh Quadrants
- Candlestick Charts with Bokeh Rectangles
- Candlestick Segments
- Stylizing the Chart
- The Concept Behind Embedding Bokeh Charts in a Flask Webpage
- Embedding the Bokeh Chart in a Webpage
- Deploying the Chart Website to a Live Server

Date:	4/06/2020	Name:	Akshatha M Deshpande
Course:	Bonus lecture on electrical engineering	USN:	4AL17EC006