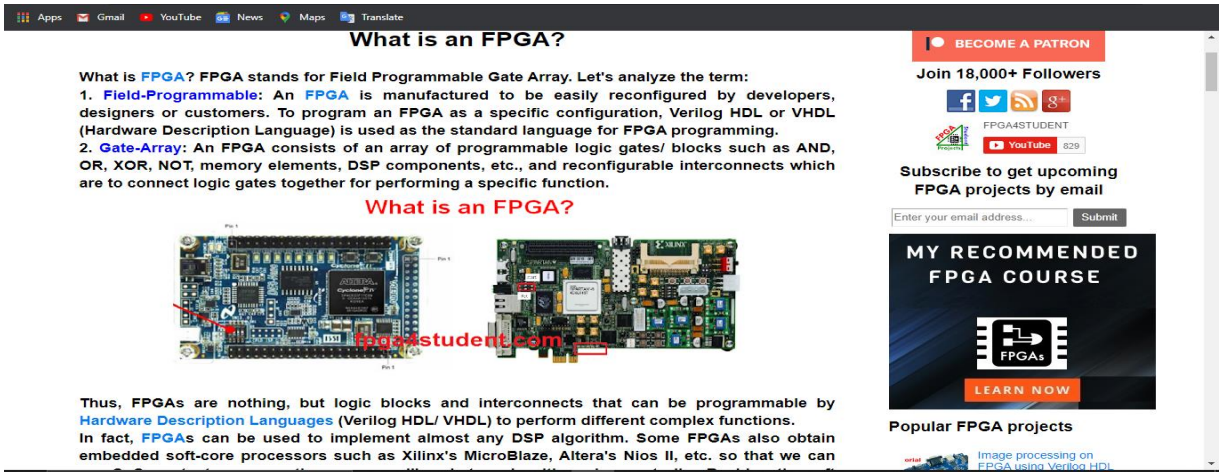
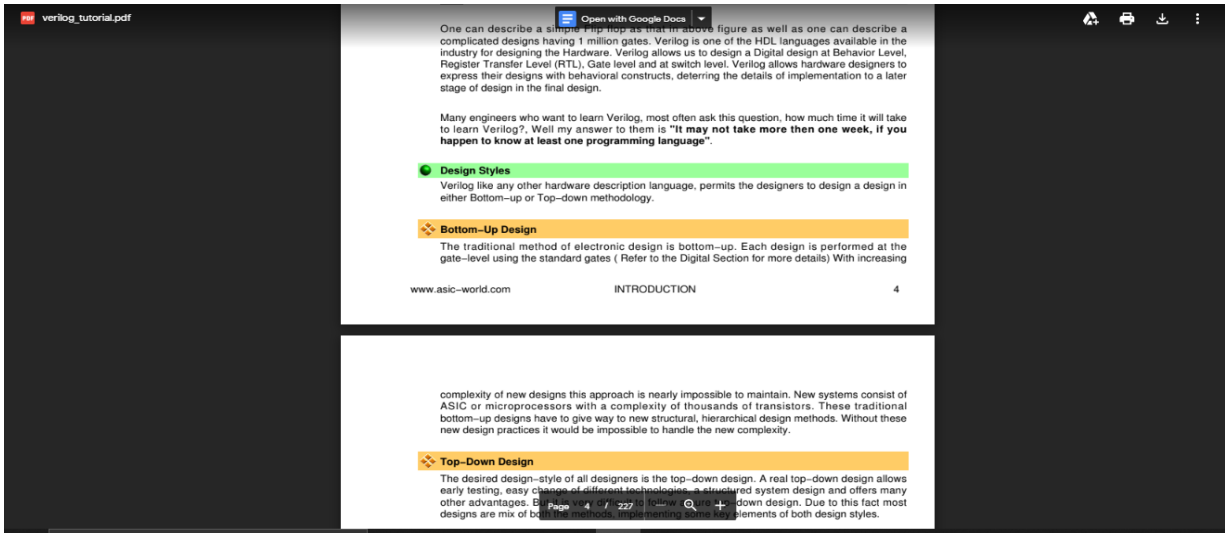
DAILY ASSESSMENT FORMAT

Date:	**05-06-2020**	**Name:**	**K B KUSHI**
Course:	**Logic Design**	**USN:**	**4AL17EC107**
Topic:	**Digital design using HDL**	**Semester & Section:**	**6th & B**
GitHub Repository:	**https://www.github.com/alvas-education-foundation/KUSHI-COURSES**		

FORENOON SESSION DETAILS

Image of session





Report –

- **FPGA stands for Field Programmable Gate Array. It is an integrated circuit which can be "field" programmed to work as per the intended design.**

- **Verilog like any other hardware description language, permits the designers to design a design in either Bottom−up or Top−down methodology.**

- **Verilog simulator was first used beginning in 1985 and was extended substantially through 1987.**

- **Various stages of ASIC/FPGA:**
  Specification
  High Level Design
  Micro Design/Low level design:
  RTL coding
  Simulation
  Synthesis
  Place and route

- **An FPGA designer likes working on this due to these reasons:**
  Very fast on-chip (FPGA) demonstration
  Simple and fast design process on FPGA
  FPGA's programmability
  FPGA's high performance
  FPGA's flexibility

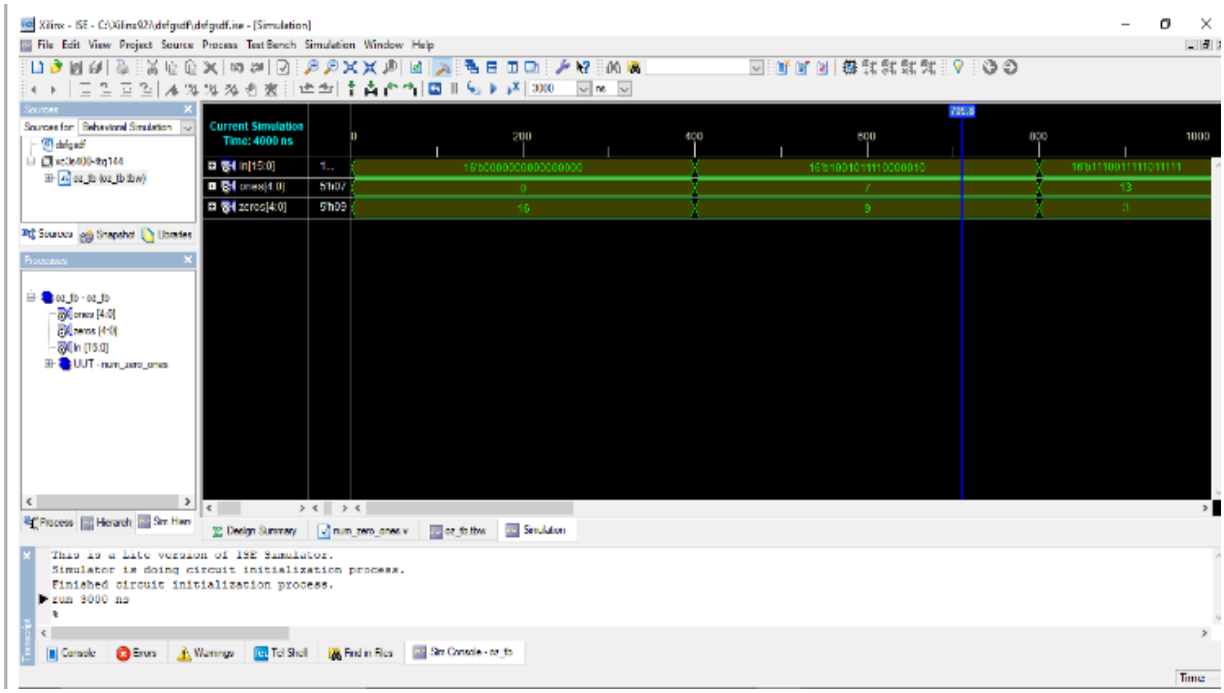
- **We also learnt the different ways and techniques of designing FPGA.**

Implement a verilog module to count number of 0's in a 16 bit number in compiler.

<u>Verilog code:</u>

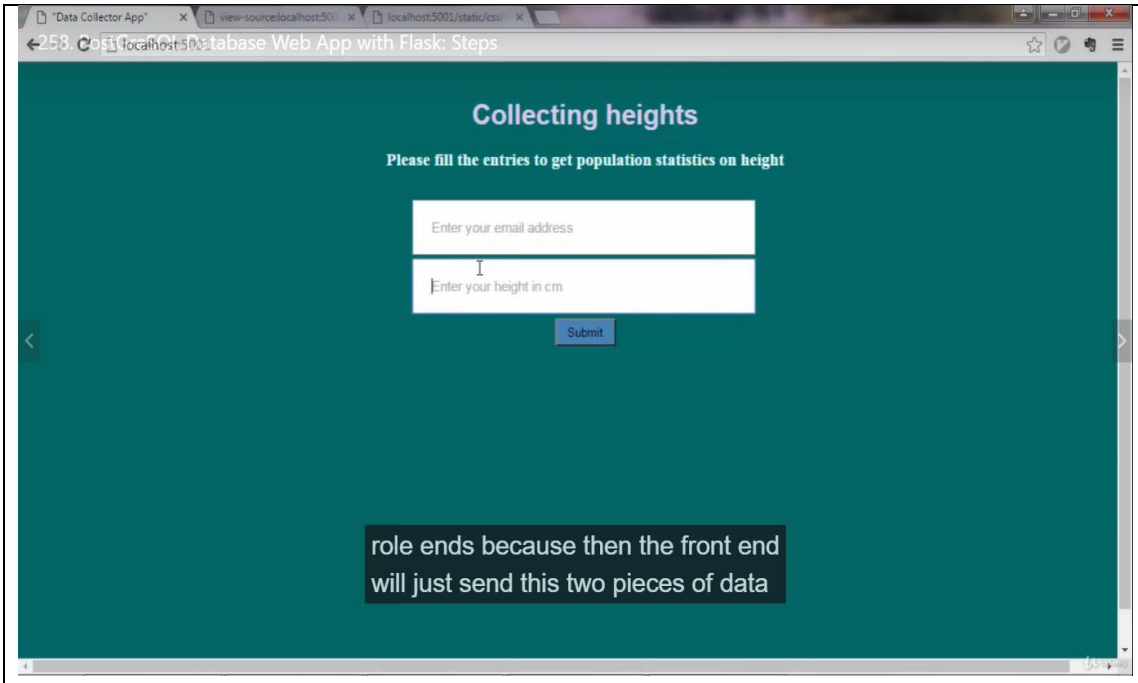
```
module num_zero_ones
(input [15:0] In,
output reg [4:0] ones,
output reg [4:0] zeros);
integer i, o, z;
always
@(in)
begin
o = 0;
z = 0;
for(i=0;i<16;i=i+1)
if(In[i] == 1'b1)
o = o + 1;
z = 16-o;
```

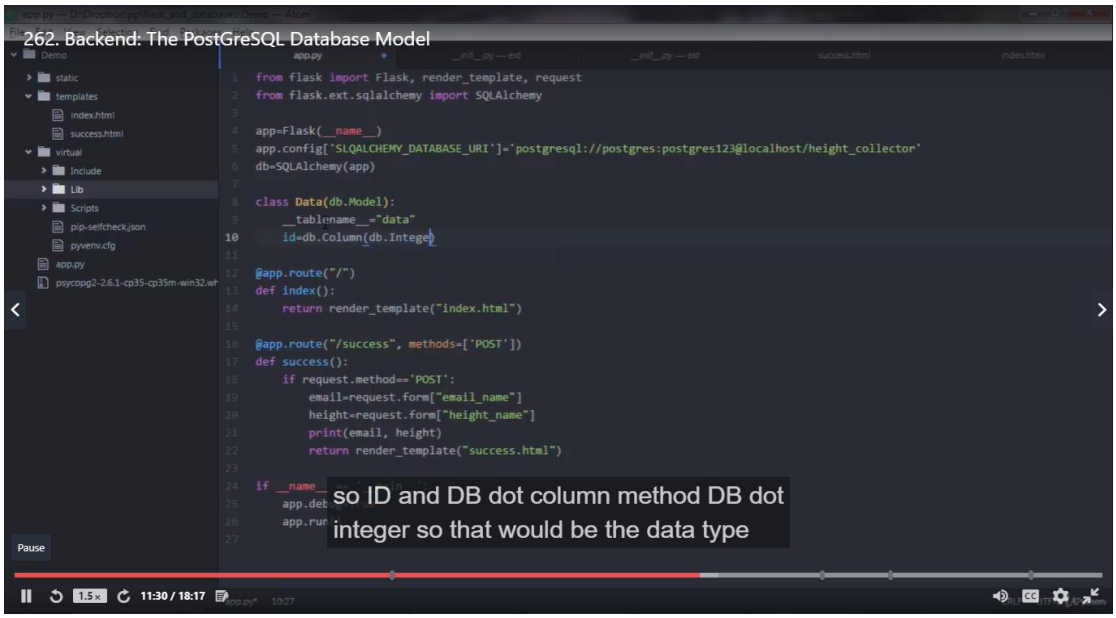
```
ones = o;
zeros = z;
end
endmodule
```



Date:	**05-06-2020**	**Name:**	**K B KUSHI**
Course:	**Udemy-python**	**USN:**	**4AL17EC107**
Topic:	**Build a data collector web app with PostGreSQL and Flask**	**Semester &Section:**	**6th & B**
GitHub repository	**https://www.github.com/alvas-education-foundation/KUSHI-COURSES**		

AFTERNOON SESSION DETAILS
Image of session





Report –

- **In this section we learnt to build a data collector web application, which collects height data from the user and sends the survey result via e-mail.**
- **To deploy the application to a live web server, Heroku platform is used and to save the data from the users, database is created in Heroku using credentials**
- **We can install Heroku CLI using this shell script.**

- **Then we have to Create python virtual environment for the project.**
- **To activate this environment, use this common inside book server directory.**
- **Then we install flask and write the code and run it.**
- **Then writing the database we need for our application is necessary.**
- **We need to define configurations for deploying environments**
- **Then we need to use flask package for database manipulations.**
- **After finishing the code completely Commit changes using git and push to Heroku.**