**DAILY ASSESSMENT FORMAT**

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| **Date:** | **05/06/2020** | **Name:** | **PADMINI M** |
| **Course:** | **LOGIC DESIGN USING HDL** | **USN:** | **4AL17EC066** |
| **Topic:** | **Verilog Tutorials and practice programs**  **Building/ Demo projects using FPGA** | **Semester & Section:** | **6th Bsec** |
| **Github Repository:** | **Padmini** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **Report – Report can be typed or hand written for up to two pages.**   * **A hardware description Language** * **is a language used to describe a digital system, for example, a network switch, a microprocessoror a memory or a simple flip−flop.** * **This just means that, by using a HDL one can describe any hardware (digital ) at any level** * **Verilog like any other hardware description language, permits the designers to design a design in either Bottom−up or Top−down methodology.** * **Verilog was started initially as a proprietary hardware modeling language by Gateway Design** * **Automation Inc. around 1984.** * **It is rumored that the original language was designed by taking** * **features from the most popular HDL language of the time, called HiLo as well as from traditional computer language such as C. At that time, Verilog was not standardized and the language** * **modified itself in almost all the revisions that came out within 1984 to 1990.** * **Verilog simulator was first used beginning in 1985 and was extended substantially through 1987.The implementation was the Verilog simulator sold by Gateway. The first major extension was Verilog−XL, which added a few features and implemented the infamous "XL algorithm" which was a very efficient method for doing gate−level simulation.** * **The time was late 1990. Cadence Design System, whose primary product at that time included** * **Thin film process simulator, decided to acquire Gateway Automation System. Along with other** * **Gateway product, Cadence now became the owner of the Verilog language, and continued to market Verilog as both a language and a simulator. At the same time, Synopsys was marketing the top−down design methodology, using Verilog. This was a powerful combination.**   **Lexical Conventions**   * **The basic lexical conventions used by Verilog HDL are similar to those in the C programming** * **language. Verilog HDL is a case−sensitive language. All keywords are in lowercase.**   **White Space**   * **White space can contain the characters for blanks, tabs, newlines, and form feeds. These characters are ignored except when they serve to separate other tokens. However, blanks and tabs are significant in strings.**   **White space characters are :**  **• Blank spaces**  **• Tabs**  **• Carriage returns**  **• New−line**  **• Form−feeds** |

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| **Date:** | **05/06/2020** | **Name:** | **PADMINI M** | |
| **Course:** | **PYTHON** | **USN:** | **4AL17EC066** | |
| **Topic:** | **Build a Data Collector Web App with PostGreSQL and flask** | **Semester & Section:** | **6th Bsec** | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session** | | | |
| **Report – Report can be typed or hand written for up to two pages.**   * Creating an API or Web application using python has been made easy with Flask. It is a micro web framework written in Python.   Steps we follow here,   * Install PostgreSQL to local machine * Install Heroku CLI * Create python virtual environment for the project * Create a sample code with Flask to check * Create database * Create configurations * Database migration * Finish the code * Commit changes using git and push to Heroku * SQLAlchemy is a Python SQL toolkit and object relational mapper (ORM) that enables Python to communicate with the SQL database system you prefer: MySQL, PostgreSQL, SQLite, and others. An ORM converts data between incompatible systems (object structure in Python, table structure in SQL database). SQLAlchemy is basically a bridge between Python and a SQL database. * The SQLite database used here is named sockmarket.db. It has only one table, named socks. It has seven fields: id, name, style, color, quantity, price, and updated. You will see the table name and the field names later, in the Python code. | | | |