**DAILY ASSESSMENT FORMAT**

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| **Date:** | **06/07/2020** | **Name:** | **Varshini MN** |
| **Course:** | **Matlab** | **USN:** | **4AL16EC089** |
| **Topic:** | **Commands**  **Arrays….** | **Semester & Section:** | **8th B** |
| **Github Repository:** | **varshinimn-test** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **REPORT**  MATLAB is an interactive program for numerical computation and data visualization. You can enter a command by typing it at the MATLAB prompt '>>' on the Command Window. COMMANDS FOR MANAGING A SESSION MATLAB provides various commands for managing a session. The following table provides all such commands −   |  |  | | --- | --- | | **Command** | **Purpose** | | clc | Clears command window. | | clear | Removes variables from memory. | | exist | Checks for existence of file or variable. | | global | Declares variables to be global. | | help | Searches for a help topic. | | lookfor | Searches help entries for a keyword. | | quit | Stops MATLAB. | | who | Lists current variables. | | whos | Lists current variables (long display). |  COMMANDS FOR WORKING WITH THE SYSTEM  * MATLAB provides various useful commands for working with the system, like saving the current work in the workspace as a file and loading the file later. * It also provides various commands for other system-related activities like, displaying date, listing files in the directory, displaying current directory, etc.  INPUT AND OUTPUT COMMANDS MATLAB provides the following input and output related commands −   |  |  | | --- | --- | | **Command** | **Purpose** | | disp | Displays contents of an array or string. | | fscanf | Read formatted data from a file. | | format | Controls screen-display format. | | fprintf | Performs formatted writes to screen or file. | | input | Displays prompts and waits for input. | | ; | Suppresses screen printing. |   **VECTORS AND MATRICES**  Vectors and matrices combine separate scalar data into a single, multidimensional signal. Modify individual elements or perform arithmetic on entire vectors and matrices. In C charts, use MATLAB functions to perform standard matrix multiplication and division. **ARRAY CREATION** To create an array with four elements in a single row, separate the elements with either a comma (,) or a space.  a = [1 2 3 4]  a = 1×4  1 2 3 4  This type of array is a row vector.  To create a matrix that has multiple rows, separate the rows with semicolons.  a = [1 2 3; 4 5 6; 7 8 10]  a = 3×3  1 2 3  4 5 6  7 8 10  Another way to create a matrix is to use a function, such as ones, zeros, or rand. For example, create a 5-by-1 column vector of zeros.  z = zeros(5,1)  z = 5×1  0  0  0  0  0 **MATRIX AND ARRAY OPERATIONS** MATLAB allows you to process all of the values in a matrix using a single arithmetic operator or function.  a + 10  ans = 3×3  11 12 13  14 15 16  17 18 20  sin(a)  ans = 3×3  0.8415 0.9093 0.1411  -0.7568 -0.9589 -0.2794  0.6570 0.9894 -0.5440   |  |  |  |  | | --- | --- | --- | --- | | **Date:** | **06/07/2020** | **Name:** | **Varshini MN** | | **Course:** | **IOT** | **USN:** | **4AL16EC089** | | **Topic:** | **Introduction to IOT** | **Semester & Section:** | **8th B** |  |  | | --- | | **AFTERNOON SESSION** |   **Image of session**  **iot1.PNG**  **iot2.PNG**  **REPORT**  **Internet Of Things(IOT):**  The Internet of Things (IoT) describes a growing industry of digital technology being harnessed to the Internet in ways that will improve the lives of every person on this planet. We can only guess at the number and types of jobs it will create. Maybe you would like a career in the IoT.  The Introduction to the Internet of Things course (I2IoT) explains what the IoT is, what it does, how it is part of digital transformation, and how you can become part of this. You will learn about the exponential increase of intelligent devices connected to the internet and you will learn to program one of these intelligent devices. The course explains artificial intelligence and the impact of automation to our future. Lastly you will understand the increased importance of privacy and security.  **THE EVOLUTION OF DIGITAL TRANSFORMATION**   * In our world today, there are more smart devices than there are people. A growing number of people are connected to the Internet, in one way or another, 24 hours a day. * An ever-increasing number of people have, and rely on, three, four, or more smart devices. These might include smartphones, exercise and health monitors, e-readers, and tablets. It is forecast that each consumer will have an average of 6.58 smart devices. * All digital devices work based on computer programs and supplied data. Artificial Intelligence implies that these devices are able to think on their own. If programmed appropriately, smart devices are able to evaluate data that is provided to them and modify processes or settings 'on the fly". If they are provided with sufficient data, they can learn" and modify their own code based on the new parameters.   **INTRODUCTION TO PACKET TRACER**  Cisco Packet Tracer is an innovative network simulation and visualization tool. This free software helps you to practice your network configuration and troubleshooting skills. You can use your desktop computer, or an Android or iOS based mobile device. Packet Tracer is available for both the Linux and Windows desktop environments.  **Students commonly use Packet Tracer to:**   * Prepare for a certification exam. * Practice what they learn in networking courses. * Sharpen their skills for a job interview. * Examine the impact of adding new technologies into existing network designs. * Build their skills for jobs in the Internet of Things.   **NETWORKING IS THE FOUNDATION**   * Thirty billion things provide trillions of gigabytes of data. Enabling these connections are the networks that we use daily. These networks provide the foundation for the Internet and the digitized world. * The methods that we use to communicate continue to evolve. * Networks form the foundation of the digitized world. Networks come in all sizes. They can range from simple networks consisting of two computers to networks connecting millions of devices. * Simple networks in homes enable connectivity to the Internet. * They also enable the sharing of resources, such as printers, documents, pictures, and music, between a few local computers. * In businesses and large organizations, networks can provide products and services to customers through their connection to the Internet. * Networks can also be used on an even broader scale to provide consolidation, storage, and access to information on network servers. * Networks allow for email, instant messaging, and collaboration among employees. In addition, the network enables connectivity to new places, giving machines more value in industrial environments. * The Internet is the largest network in existence and effectively provides the “electronic skin” that surrounds the planet. In fact, the term Internet means a “network of networks”. * The Internet is literally a collection of interconnected private and public networks. Businesses, small office networks, and home networks connect to the Internet. |