**DAILY ASSESSMENT FORMAT**

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| **Date:** | 08 July 2020 | **Name:** | Anupama J S |
| **Course:** | Matlab Onramp | **USN:** | 4AL16EC005 |
| **Topic:** | Calling function  Obtaining help  Plotting data | **Semester & Section:** | 8th sem “A”section |
| **Github Repository:** | AnupamaJS |  |  |

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| **FORENOON SESSION DETAILS** |
| C:\Users\User\Pictures\Screenshots\Screenshot (266).png  C:\Users\User\Pictures\Screenshots\Screenshot (267).png  **C:\Users\User\Pictures\Screenshots\Screenshot (268).png**  Obtaining multiple outputs from functions callsThesizefunction can be applied to an array to produce a single output variable containing the array size.s = size(x)Thesizefunction can be applied to a matrix to produce either a single output variable or two output variables. Use square brackets ([]) to obtain more than one output.[xrow,xcol] = size(x)The maximum value of a vector and its corresponding index value can be determined using themaxfunction. The first output from themaxfunction is the maximum value of the input vector. When called with two outputs, the second output is the index  value.[xMax,idx] = max(x)  Obtaining help  The MATLAB documentation contains examples and information that can help you when working on your own problems.Plotting dataTwo vectors of the same length can be plotted against each other using theplotfunction.plot(x,y)  Tools that Import Multiple File Formats  You can import data into MATLAB from a disk file or the system clipboard interactively.To import data from a file, do one of the following:  On theHometab, in theVariablesection, selectImport Data  Double-click a file name in the Current Folder browser.  Calluiimport.To import data from the clipboard, do one of the following:  On the Workspace browser title bar, click, and then selectPaste.  Calluiimport.To import without invoking a graphical user interface, the easiest option is to use theimportdatafunction. |

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| **Date:** | 8 July 2020 | **Name:** | Anupama J S |
| **Course:** | Cisco Certification Course:  Introduction to  Internet of Things | **USN:** | 4AL16EC005 |
| **Topic:** | Chapter 3 | **Semester & Section:** | 8th sem “A”section |
| **Github Repository:** | AnupamaJS |  |  |
| **AFTERNOON SESSION DETAILS** | | | |
| C:\Users\User\Downloads\WhatsApp Image 2020-07-08 at 9.13.56 PM.jpegC:\Users\User\Downloads\WhatsApp Image 2020-07-08 at 9.13.56 PM (1).jpegWhat is Big Data?Data is information that comes from a variety of sources, such as people, pictures, text, sensors, and web sites. Data also comes from technology devices like cell phones, computers, kiosks, tablets, and cash registers. Most recently, there has been a spike in the volume of data generated by sensors. Sensors are now installed in an ever growing number of locations and objects. These include security cameras, traffic lights, intelligent cars, thermometers, and even grape vines!Big Data is a lot of data, butwhat is a lot? No one has an exact number that says when data from an organization is considered “Big Data.” Here are three characteristics that indicate an organization may be dealing with Big Data:They have a large amount of data that increasingly requires more storage space (volume).They have an amount of data that is growing exponentially fast (velocity).They have data that is generated in different formats (variety).How much data do sensors collect? Here are some estimated examples:Sensors in oneautonomous car can generate 4,000 gigabits (Gb) of data per day.An Airbus A380 Engine generates 1 petabyte (PB) of data on a flight from London to Singapore.Safety sensors in mining operations can generate up to 2,4 terabits (TB) of data every minute.Sensors in one smart connected home can produce as much as 1 gigabyte (GB) of information a week.Large DatabasesWhile Big Data does create challenges for organizations in terms of storage and analytics, it can also provide invaluable information to fine-tune operations and improve customer satisfaction.Companies do not necessarily have to generate their own Big Data. Smaller organizations might not have the sensors, the volume of customers, or the ability to generate the variety of information that could benefit their company. There are sources of free data sets available, ready to be used and analyzed by anyone willing to look for them.Many companies of various sizes believe they have to collect their own data to see benefits from big data analytics, but it is simply not true.What Are the Challenges of Big Data?IBM’s Big Data estimates conclude that “each day we create 2.5 quintillion bytes of data”. To put this into context, every minute of every day:We upload over 300 hours of YouTube video.We send over 3.5 million text messages.We stream over 86thousand hours of Netflix video.We like over 4 million Facebook posts.We request over 14 million forecasts from The Weather Channel.To see more live Internet statistics clickhere.The rapid growth of data can be an advantage or an obstacle when it comes to achieving business goals. To be successful, enterprises must be able to easily access and manage their data assets.With this enormous amount of data being constantly created, traditional technologies and data warehouses cannot keep up with storage needs. Even with the cloud storage facilities that are available from companies like Amazon, Google, Microsoft, and many others, the security of stored data becomes a big problem. Big Data solutions must be secure, have a high fault tolerance, and use replication to ensure data does not get lost. Big Data storage is not only about storing data, it is alsoabout managing and securing | | | |