**DAILY ASSESSMENT FORMAT**

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| **Date:** | **06-July-2020** | **Name:** | **Raziya Banu** |
| **Course:** | **Matlab Onramp** | **USN:** | **4AL16EC058** |
| **Topic:** | **Overview and MATLAB Desktop and Editor** | **Semester & Section:** | **8th sem & ‘B’ section** |
| **Github Repository:** |  |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session** |
| **Report –**  In my first session today I have studied about - **Overview and MATLAB Desktop and Editor** Array Creation Functions Instructions are in the task pane to the left. Complete and submit each task one at a time. Task 1 x = rand(5) Task 2 x = rand(5,1) Task 3 x = zeros(6,3)  **Starting MATLAB from the Windows Desktop or a DOS Window**  Start MATLAB on a Microsoft Windows platform, select the Start > Programs > MATLAB > R2007b > MATLAB R2007b, or double-click the MATLAB R2007b shortcut icon on your Windows desktop. The shortcut was automatically created when you installed MATLAB. If you have trouble starting MATLAB, see troubleshooting information in the Installation Guide for Windows. To start MATLAB from a DOS window, cd to the directory in which you want to start MATLAB and type matlab at the DOS prompt. After starting MATLAB, the desktop opens. Desktop components that were open when you last shut down MATLAB will be opened on startup. For more information  This startup feature is based on your Windows file type associations. When you installed MATLAB for Windows, you specified the file types to 1-2 Starting MATLAB on Windows Platforms associate with MATLAB. For example, if you accepted the default options, double-clicking an M-file in Windows Explorer opens the file in the MATLAB Editor/Debugger. Other default options associate MEX-files and P-files with MATLAB in Windows Explorer, which assigns the file types a MATLAB icon.  However, double-clicking a file with a .mex (.mexw32 or .mexw64), or .p extension does not run or open the file in MATLAB. File Type and Resulting Action File Type Result FIG-file Opens file in figure window M-file Opens file in Editor/Debugger MAT-file Opens Import Wizard to load the data into the MATLAB workspace MDL-file Opens file in Simulink® model window MEX-file Displays MATLAB icon in Windows Explorer P-file Displays MATLAB icon in Windows Explorer Other applications you use can change Windows file associations. For example, Microsoft Access might associate files having a .mat extension. Then, double-clicking a MAT-file opens Access rather than MATLAB. If you double-click a FIG-file, M-file, MAT-file, or MDL-file and it does not open in MATLAB, try this instead: 1 In Windows Explorer, right-click a file with one of the extensions listed in the preceding table, for example, myfile.mat. 2 From the context menu, select Open With. If MATLAB is one of the choices, select it to open myfile.mat in MATLAB.  If MATLAB is not one of the choices, you will need to associate the file type with MATLAB using one of these techniques:  • “Utility to Change Windows File Associations”  • “Changing File Associations for MATLAB from Windows” Startup and Shutdown After associating a file type with MATLAB, you can open other applications using that file type via the context menu.  For example, right-click myfile.mat, and from the context menu, select Open With. Microsoft Access will be one of the options. File associations for Windows Explorer do not affect what happens when you open one of these file types from within MATLAB. MATLAB acts on the file 1-4 Starting MATLAB on Windows Platforms using the MATLAB tool associated with that file type. For example, even if you associate .mat files with Microsoft Access, when you open a MAT-file from within MATLAB, it opens the Import Wizard to load the data. Utility to Change Windows File Associations If you are viewing this topic in the MATLAB Help browser, you can run one of the utilities provided here to create Windows associations for common MATLAB file types.  This requires you to have permission to write to the HKEY\_CLASSES\_ROOT registry key, which typically requires power user or administrator privileges.  • Run utility to associate MATLAB with FIG-files  • Run utility to associate MATLAB with M-files  • Run utility to associate MATLAB with MAT-files  • Run utility to associate MATLAB with MDL-files  • Run utility to associate MATLAB with MEX-files  • Run utility to associate MATLAB with P-files  • Run utility to associate MATLAB with all of these file types: FIG, M, MAT, MDL. MEX, and P The file type icon in Windows Explorer might not reflect the change immediately |

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| **Date:** | **06-July-2020** | **Name:** | **Raziya Banu** | |
| **Course:** | **Coursera** | **USN:** | **4AL16EC058** | |
| **Topic:** | **Inrtoduction to SQL** | **Semester & Section:** | **8th sem & ‘B’ section** | |
| **AFTERNOON SESSION DETAILS** | | | |
| **Image of session** | | | |
| SQL (Structured Query Language) is a standardised programming language designed for data storage and management. It allows one to create, parse, and manipulate data fast and easy.  With the AI-hype of recent years, technology companies serving all kinds of industries have been forced to become more data driven. When a company that serves thousands of customers is data driven, they’ll need a way to store and frequently access data on the order of millions or even billions of data points.  That’s where SQL comes in.  SQL is popular because it’s both fast and easy to understand. It’s designed to be read and written in a similar way to the English language. When an SQL query is used to retrieve data, that data is not copied anywhere, but instead accessed directly where it’s stored making the process much faster than other approaches.  This tutorial will teach you the basics of SQL including:   * Creating database tables * Populating the database tables with real data * Retrieving your data for usage in a Data Science or Machine Learning task   Let’s jump right into it! Installing MySQL The first thing we’ll do is actually install our SQL server! That’ll give us a workbench to start playing around with databases and SQL queries.  To install a MySQL server, you can run the following command from your terminal:  sudo apt-get install mysql-server  Now we’ll start our MySQL server. This is similar to how we start Python in the terminal by just typing out “python”. The only difference here is that it’s convenient to give our server root privileges so we’ll have flexible access to everything.  sudo mysql -u root -p  Great! Now our mysql server is running and we can start issuing MySQL commands.  A couple of things to keep in mind before we move forward:   * All MySQL commands end with a semicolon. If the command you type does not end with a semicolon then it won’t work! * MySQL commands are typically written in uppercase while any user defined text or numbers are in lowercase to make them easier to distinguish. It’s not strictly required (you won’t get any errors if you don’t follow this), but it’s generally recommended for readability.  Creating an SQL database and tables Now we’re ready to create our first SQL database.  A [database](http://en.wikipedia.org/wiki/Database" \t "_blank) is an organised collection of data. In practical terms, you can think of a database as the highest level in the hierarchy.  A table stores data in rows (tuples) and columns (attributes). A database can and usually does consist of multiple tables  For the rest of our tutorial, we’re going to be using Soccer (or Football if you prefer) players’ stats for the data in our database.  The above command did a few things for us:   1. It created a table called “stats” within the “soccer\_stats” database 2. We set up 6 columns in the table — id, name, goals, assists, points, and shots 3. For each column, we’ve defined the type of data we want that column to store. 4. The “id” column has a special type (INTEGER NOT NULL PRIMARY KEY AUTO\_INCREMENT) that automatically numbers each row. It’s good practice to give each row a unique id when building SQL tables in case two rows have the exact same data. 5. Adding data to our SQL table   Now we’ll starting populating our table with soccer stats data!  Remember how I mentioned that SQL is very human-readable? Inserting data into our table can be done using a command called INSERT followed by the table name and a simple tuple of the data we would like to insert.  A couple of things to keep in mind when inserting data:   * We can set the id as NULL since it will auto increment (as explained in the previous section) * Be sure that your data types of the data you are inserting match those of the table you have defined | | | |