Lab Report No 1



Submitted By:

Registration No:

Section:

"On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work"

Student Signature:

<u>Department of Computer Systems Engineering</u>

<u>University of Engineering and Technology Peshawar</u>

CSE 309L:	Communication Systems
CDL DUJL.	Communication Systems

Accuracy	The student mis-configured enough signal processing settings that the computer couldn't function properly.	The student configured enough signal processing settings that the computer partially functioned	The student configured the signal processing settings that the computer fully functioned	30%
Following Directions	The student clearly failed to follow the verbal and written instructions to successfully complete the lab	The student failed to follow the some of the verbal and written instructions to successfully complete all requirements of the lab	The student followed the verbal and written instructions to successfully complete requirements of the lab	20%
Time Utilization	The student failed to complete even part of the lab in the allotted amount of time	The student failed to complete the entire lab in the allotted amount of time	The student completed the lab in its entirety in the allotted amount of time	20%

Lab 1: Matlab Training

Visit the following website: https://www.mathworks.com/learn/tutorials/matlab-onramp.html and perform the following tasks and attach the Certificate acquired from MathWorks as part of the lab Report

1. Course Overview

- a. Objective: Familiarize yourself with the course.
- b. Remarks along with final snapshot

2. Commands

- a. Objective: Enter commands in MATLAB to perform calculations and create variables.
- b. Remarks along with final snapshot

3. Vectors and Matrices

- a. Objective: Create MATLAB variables that contain multiple elements.
- b. Remarks along with final snapshot

4. Importing Data

- a. Objective: Bring data from external files into MATLAB.
- b. Remarks along with final snapshot

5. Indexing into and Modifying Arrays

- a. Use indexing to extract and modify rows, columns, and elements of MATLAB arrays.
- b. Remarks along with final snapshot

6. Array Calculations

- a. Objective: Perform calculations on entire arrays at once.
- b. Remarks along with final snapshot

7. Calling Functions

- a. Objective: Call functions to obtain multiple outputs
- b. Remarks along with final snapshot

8. Obtaining Help

- a. Objective: Use the MATLAB documentation to discover information about MATLAB features.
- b. Remarks along with final snapshot

9. Plotting Data

- a. Visualize variables using MATLAB's plotting functions.
- b. Remarks along with final snapshot

10. Review Problems

- a. Objective: Bring together concepts that you have learned with a project.
- b. Remarks along with final snapshot

11. MATLAB Scripts

- a. Objective: Write and save your own MATLAB programs
- b. Remarks along with final snapshot

12. Logical Arrays

- a. Objective: Use logical expressions to help you to extract elements of interest from MATLAB arrays.
- b. Remarks along with final snapshot

13. Programming

- a. Objective: Write programs that execute code based upon some condition.
- b. Remarks along with final snapshot

14. Final Project

- a. Objective: Bring together concepts that you have learned with a project.
- b. Remarks along with final snapshot

15. MathWorks Certificate