

Assessment 2 Brief- Addendums

- Below are the detailed instructions for the subject assessment.

Instructions for Assessment 2-Part A.

1. Assessment due date: Sunday 11:55 pm - Week 6
2. Weight: 20%
3. You are given a set of **programming exercises (Set 1)** (with 2 exercises).
4. Write the code for these 2 exercises (10% for each).
5. Using **toolbox/functions/libraries** for the related assignments (instead of writing the code yourself) **does not align** with the requirements of this assessment.
6. **Submission Format:** You need to submit **two zip files** (i.e., “Problem 1” and “Problem 2”). Each zip file should include the following for the relevant problem:
 - a) **Release Build:** An executable release build must be included with the submission. Ensure project settings are set to Release when creating this build.
 - b) **Source Code:** All relevant source code files and project files.
 - c) **Reflective Report (Word):** This should provide a detailed account of your research, critical analysis, findings, results, and references. This report should be at the postgraduate level. It should also contain **your algorithm** and why you have chosen this method over other methods.
 - d) **A video of the program's run:** You need to record your screen while running the program and fully demonstrate the correct execution of your code with the results.
 - e) **Your code is in a text file,** so the system automatically checks the AI issues.
7. For further information, you may refer to the assessment brief.

Instructions for Assessment 2-Part B.

1. Assessment due date: Sunday 11:55 pm- Week 10
2. Weight: 20%
3. You are given a set of **programming exercises (Set 2)** (with 2 exercises).
4. Write the code for these 2 exercises (10% for each).
5. Using **toolbox/functions/libraries** for the related assignments (instead of writing the code yourself) **does not align** with the requirements of this assessment.
6. **Submission Format:** You need to submit **two zip files** (i.e., “Problem 1” and “**Problem 2**”). Each zip file should include the following for the relevant problem:
 - a) **Release Build:** An executable release build must be included with the submission. Ensure project settings are set to Release when creating this build.
 - b) **Source Code:** All relevant source code files and project files.
 - c) **Reflective Report (Word):** This should provide a detailed account of your research, critical analysis, findings, results, and references. This report should be at the postgraduate level. It should also contain **your algorithm** and why you have chosen this method over other methods.
 - d) **A video of the program's run:** You need to record your screen while running the program and fully demonstrate the correct execution of your code with the results.
 - e) **Your code is in a text file,** so the system automatically checks the AI issues.
7. For further information, you may refer to the assessment brief.

Assessment 2 programming exercises:

Set 1	<ol style="list-style-type: none">1. Write a program based on a recursive function to calculate the determinant of a $n \times n$ general matrix2. Write a program to find the Eigenvalues, Eigenvectors, and Eigenspaces of a $n \times n$ general matrix.
Set 2	<ol style="list-style-type: none">1. Write a program to calculate the Integral of a general function.2. Write a program that calculates the gradient for RRBf_type1 or RRBf_type2 (choose the one you prefer). Refer to this paper: https://research.ijcaonline.org/volume92/number3/pxc3894955.pdf