**CS2008 Numerical Computing**



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| **Assignment No:** 02 | **CLO:** |
|  | **Semester:** Spring2024 |
| **Due date: As of GCR date** | **Marks:**  100 |

# Instructions

1. **Plagiarized work will result in zero marks.**
2. **No retake or late submission will be accepted.**
3. The submission should be a SINGLE UNZIPPED NOTEBOOK submitted on googles classroom.
4. This notebook should be properly documented what you did? How you did it? And the source-code for each part as well as the generated outputs.
5. Your submission file should be according to the following **format: id\_section\_A2** e.g., i22123456\_A\_A2. (Note: A2 in the end denotes Assignment 2).

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| 1 | Direct Method | 50 marks |
|  | Direct Method: Compute Coefficients |  |
|  | Direct Method: Evaluate Polynomial |  |
|  | Direct Method: Testing |  |
| 2 | Newton Method | 50 marks |
|  | Newton Method: Compute Coefficients |  |
|  | Newton Method: Evaluate Polynomial |  |
|  | Newton Method: Testing |  |

Your task is to complete missing code marked with "TODO" in the provided Jupyter Notebook. The notebook covers exercises on Direct Method (matrix version) finding p(x) for predifined f(x) and Newton Method algorithms for polynomial computation. You need to complete missing code in the notebook file.