University of Lincoln
School of Computer Science
UG Criterion Reference Grid 2023-2024

UNIVERSITY OF LINCOLN

CMP3749M Big Data CRG 2023-2024

Learning Outcome	Criterion	Pass	2:2	2:1	1st
[LO2] apply data science toolkits in a range of applications to solve real-world problems	Report section and source code for the PySpark Analysis of Nuclear Plants dataset (Task 1) (40%)	A basic report and accompanying source code is provided, with most questions attempted. Some of the process is followed as instructed, and some of the questions are answered correctly with a basic level of detail. The source code provides some evidence for the completed tasks using PySpark mostly but may lack clarity and appropriate comments. References are missing or are provided but may be inappropriate.	A good report and accompanying source code is provided, with all questions attempted. The majority of the process and the majority of the questions are answered correctly with a reasonable detail. The report is structure and figures are in readable quality. The source code provides reasonable evidence for the completed tasks using PySpark but may lack clarity and appropriate comments. Appropriate references are provided but may be minimal in number.	A solid report and accompanying source code is provided, with all questions attempted. All of the process is followed as instructed, and all of the questions are answered correctly with a fair level of detail. The report well structure and figures are in high quality. The source code provides solid evidence for the completed tasks using PySpark but may lack appropriate comments. A good number of solid references are provided, from academically appropriate sources.	An excellent report and accompanying source code is provided. All of the process is followed as instructed, and all of the questions are answered correctly with a high level of detail and critical reflection. The report well structure and figures are in high quality. The source code provides solid evidence for the completed tasks using PySpark with high clarity and solid comments. A good number of solid references are provided, from academically appropriate sources.

	Report section and source code for the use of MapReduce for Margie Travel dataset (Task 2) (40%)	A basic report and accompanying source code is provided, with most questions attempted. Some of the process is followed as instructed, and some of the questions are answered correctly with a basic level of detail. At minimum you must be able to successfully determines the number of flights from each airport and creates a list of flights based on Flight ID, including the requested information. The source code provides some evidence for the completed tasks but may lack clarity and appropriate comments.	A reasonable report and accompanying source code is provided, with all questions attempted. The majority of the questions are answered correctly with a fair level of detail. At minimum you must be able to successfully determines the number of flights from each airport and creates a list of flights based on Flight ID, including the requested information. Attempting to calculates the line-of-sight miles for each flight. The report is structure and figures/tables are in reasonable/readable quality. The source code provides reasonable evidence for the completed tasks but may lack clarity and appropriate comments.	A solid report and accompanying source code is provided, with all questions attempted. The majority of the questions are answered correctly with a good level of detail. At minimum you must be able to successfully determines the number of flights from each airport and creates a list of flights based on Flight ID, calculates the line-of-sight miles for each flight, including the requested information. The report well structure and figures/tables are in high quality. The source code provides solid evidence for the completed tasks but may lack appropriate comments.	An excellent report and accompanying source code is provided. All of the questions are answered correctly with a high level of detail and critical reflection. The code successfully accomplishes the specified tasks, code running without errors and producing correct results. The report well structure and figures/tables are in high quality. The source code provides solid evidence for the completed tasks with high clarity and solid comments.

[LO1] Critically appraise and evaluate Big Data Analytics concepts, tools and techniques.	Report section for Big Data Tools and Technology Appraisal (Task 3) (20%)	Basic understanding of the Big Data concepts. Limited evaluation of tools and techniques used. Limited number of referencing.	Adequate grasp of the Big Data concepts, though lacking depth. Basic mention of limitations and challenges related to Tasks 1 and 2. Generally clear presentation, some minor issues. Adequate number of referencing.	Clear and comprehensive understanding of the Big Data concepts, tools and techniques used to solve Tasks 1 and 2 along with discussing the scalability of the tools/libraries. Solid critical analysis with some suggestions. Clear and organised presentation. Reasonable referencing and evidence from the produced answers.	Demonstrates a profound understanding of Big Data concepts, showcasing exceptional insights into underlying principles of the concepts, tools and techniques used to solve Tasks 1 and 2. Good critical analysis with valuable suggestions around large-scale data processing and scalability. Information well organised and presented. Good referencing and evidence from the produced answers. Good referencing and evidence from the produced answers.
Weighting	The single criterion for this assessment is weighted as indicated.				