[Task 1 total will be weighted by your contribution score in each of the 10 meeting minutes.]

**1.a) Requirements & Design (70 - 100%)**

* Identified all requirements (for data processing) – listed, described and well understood.

**Basic requirements**: searching/sorting/etc.

**Advanced requirements**: performance optimisation/clustering/etc.

* Excellent understanding of algorithms and Python packages that will be used for data

processing.

* Professionally written documentation.

**Identified how data processing application will interact with users (detailed and concise):**

1. Menu functions and how it will be used.
2. Format of produced output.
3. Command line parameters.

**1.b) Project management and usage of a source control repository (70 - 100%)**

* EVIDENCE of regular and clearly planned group meetings.
* Well maintained logs.
* Equitable (fair) team involvement.
* **All required code presented in a private SCM (GitHub)**:

1. Named as specified.
2. Accessible to team and module leader.

* **SCM shows evidence of consistent group participation**:

1. Commits
2. Commenting – meaningful descriptions of change set.
3. Use of merge requests with comments.
4. Use of branches

**1.c) Implementation of the requirements (70 - 100%)**

* Software meets all requirements:

1. **Basic requirements**: searching/sorting/etc.
2. **Advanced requirements**: performance optimisation/clustering/etc.

* Code standard is clear and readable (adheres to industry standard).
* **Commenting**: Clear, concise and descriptive.
* Evidence of consistent of realising good design practice (separation of concerns/modularity).

**1.d) Demonstration (70 – 100%)**

* Outline of the project goals.
* Presentation runs to time.
* Clear, prepared, confident and refined presentation style.
* Reflection on difficulties faced.
* Evidence of personal gains and difficulties overcome.
* Accurate and sophisticated answers to questions asked.

**2.) Data Visualization (70 – 100%) [INDIVIDUAL]**

* Produced different types of data visualization:

Plots/Graphs/Charts/Maps – using Python libraries.

* Visual output is professionally formatted.
* Demonstrates advanced usage of Python packages and data visualization.
* INDIVIDUAL REPORT:

1. Clear, concise and expressive.
2. Detailed description and explanation of used libraries – with justification.
3. Insight as to why a certain approach was used - with justification.