

Faculty of Computer and Mathematical Sciences
Universiti Teknologi MARA
Cawangan Perlis, Kampus Arau
Individual Assignment
DSC650 - Data Technology and Future Emergence
Mar 2025 – Jul 2025 (20252)

Individual Assignment: Understanding and Applying Basic Big Data Concepts

Objective:

To demonstrate your understanding of the key concepts of data technology and big data, including the 5Vs, types of data, and big data analytics techniques.

Task 1: Definition and Conceptual Understanding (3 marks)

In your own words, briefly define the following terms (3–5 sentences each):

- a. Big Data
- b. Data Analytics
- c. Structured, Unstructured, and Semi-structured Data

Task 2: The 5 Vs of Big Data (2 marks)

Using a real-world example (e.g., e-commerce, healthcare, social media), explain how each of the 5 Vs (Volume, Velocity, Variety, Veracity, Value) applies in that context.

Task 3: Types of Data Analytics (3 marks)

For each type of analytics below, provide:

- A short explanation
- One real-world use case example
 - a. Descriptive Analytics
 - b. Diagnostic Analytics
 - c. Predictive Analytics
 - d. Prescriptive Analytics

Task 4: Reflection (2 marks)

Reflect on the relevance of Big Data in your future career. Write a short paragraph (5–7 sentences) on how Big Data skills can be applied in your field of study.

Submission Guidelines:

- Submit via the learning management system (LMS) or email.
- Use proper formatting and referencing (if needed).
- Ensure clarity, originality, and concise responses.