

|  |
| --- |
| CS 1103 - FR02B  Assignment 7 |
| By Ngoc Phuong Anh Nguyen - 3712361  April 2021 |

# **Review Questions:**

## Question 1: What is Big Data? Give a brief definition.

Big Data generally is a set of data that displays the characteristics of volume, velocity, and variety.

## Question 2: What are the traditional 3 Vs of Big Data? Briefly, define each.

* **Volume:** The quantity of data to be stored.
* **Velocity:** The speed at which data is entering the system.
* **Variety:** The variations in the structure of the data to be stored.

## Question 4: Explain the difference between *scaling up* and *scaling out*

* **Scaling up:** A method for dealing with data growth that involves migrating the same structure to more powerful systems.
* **Scaling out:** A method for dealing with data growth that involves distributing data storage structures across a cluster of commodity servers.

## Question 13: What are the four basic categories of NoSQL databases?

* Key-value database
* Document databases
* Column-oriented databases
* Graph databases

## Question 14: How are the value components of a key-value database and a document database different?

* T**he value components of a key-value database:** The value component is unintelligible to the DBMS.
* **The value components of a document database:** T the value component is composed of a tag-encoded document.