

### Assignment 1 (Deadline Week 3)

#### Question 1.

Big data has the 4V properties. Use the operation of Amazon Online to explain the terms: Volume and Velocity in Big Data.

(10 marks)

#### Question 2.

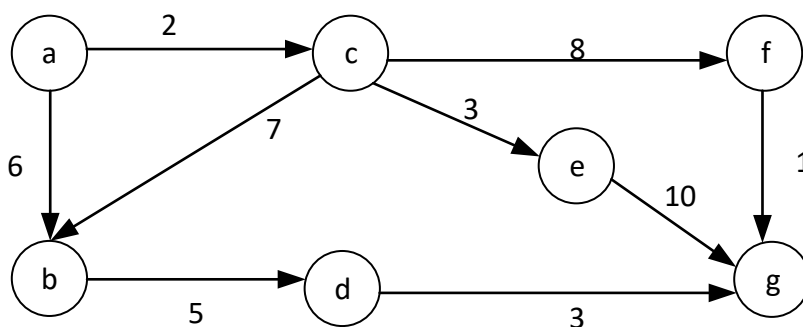


Figure Q2

Figure Q2 show a weighted digraph.

(a1) What is the adjacency matrix of the weight digraph?

(a2) Use the Dijkstra's Algorithm to find the shortest path from node-a to node-g. Show your steps.

(10 marks)

#### Question 3

In university, we may face some structured data and unstructured data. Give two examples for each data type. Briefly explain your answer.

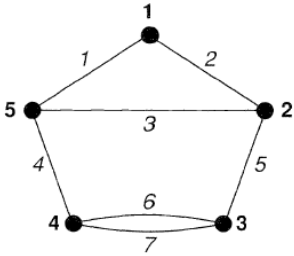
(10 marks)

Question 4 => EXE1 Question 9

(5 marks)

### Question 5

What are the degree of nodes in the following unweighted graph ? Note that the numbers near the edges are edge labels (NOT the weights).



(5 marks)