# CS5250: Quiz 1

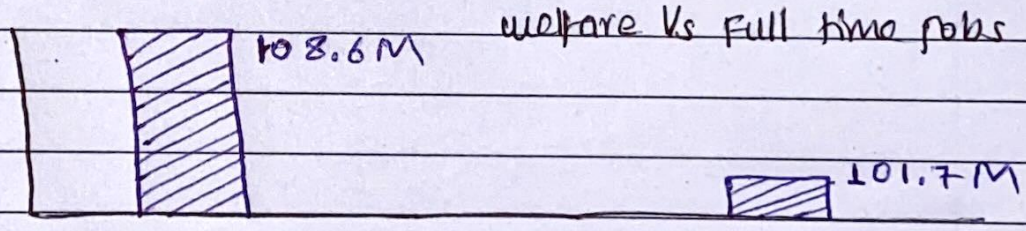


1. What are the 4 main functions of data visualisation?
   1. To record information
      - have a graphical record of something
   2. To analyze data, reveal trends and patterns, and support reasoning
   3. Confirm a hypothesis about the data
   4. communicate ideas / persuade / convince / inspire others

2. What is mean by exploratory data analysis?
   a. An initial way by which we can get a feel for data

3. Which of the following statements is true about data visualisations?
   b. The only way to extract information from data is by using a visualisation.

4. What is misleading about the visualisation below?




   b. The Y AXIS is truncated and not labeled, Making the large bar appear 4 times as large as the smaller bar when it's really only a 7% increase.

5. What is the role of exploratory graphs in data analysis?
   c. They are typically made very quickly.
6. Why are data visualisations useful?
6. What's another reason visualisation is important?
   a. They are visual aids for our brains which don't remember well. It's "things" from the external world that make us smart and visualizations serve as cues to activate this.

7. What is the "lie factor" that Edward Tufte refers to?
   iii. It's distorting the data with graphics that aren't accurate or representative of scale.

8. What is meant by visualisation?
   d. The ability to create pictures of a text in you mind.

9. Name a common problem with design and visualisations today.
   ii. people are designing visualizations because they can (or have to), not because they're good at it.

10. Most often, exploratory data analysis relies on
    c. visual techniques.