

Instructions for Project Part B

General

The submission deadline is **2359 hours on 15 November 2020** (the Sunday before Reading Week).

The submission is like that for part A, i.e., to a LumiNUS folder containing your tutor's name. The **document must be a WORD document saved as a PDF** named

[tutorial group]_[project group]_partB.PDF

It should not exceed 3 pages and its size should not be larger than 5 MB. Please state the name and student number of every group member in the **header of the document**.

Any query must be posted on LumiNUS Forum. None of the tutors will entertain queries privately.

The Task

You must use only three datasets to answer all the questions. The first two are:

{d1} hospital-admission-rate-by-age-and-sex.csv

{d2} hospital-admission-rate-by-sex.csv

from <https://data.gov.sg/dataset/hospital-admission-rate-by-age-and-sex> which you should read for background information. To find out what admission means, you can visit <https://www.moh.gov.sg/resources-statistics/healthcare-institution-statistics/hospital-admission-rates-by-age-and-sex/hospital-admission-rates-by-age-and-sex-2017>

There is no need to state the definition of admission in your submission.

Download the third dataset {d3} as an **XLSX file** from <https://www.tablebuilder.singstat.gov.sg/publicfacing/createDataTable.action?refId=14911>

You are required to answer **6 questions**. The weight of each question is indicated in []. Your answers must provide **sufficient detail for us to follow the source of information and the reasoning and calculation involved, unless otherwise stated, like in Question 2**. You may refer to your answers to previous questions. Relevant tables, graphs and EXCEL or other spreadsheet formulae can also be included.

Submissions will be checked for possible plagiarism. Your group is advised not to communicate with other groups on this task.

1. [2] The bottom right cell (E199) of {d1} shows 25.8. If any of the following statements about community hospitals in 2019 is true, explain why briefly.

(a) 25.8 admissions involved female residents aged 65 years & above.

(b) 25.8% of admissions involved female residents aged 65 years & above.

If both are false, explain what 25.8 means in words, without using the word “rate”.

2. [3] Copy the table below into your document and fill it with the correct male (M) and female (F) acute care admission rates in the 3 age groups and for the 3 indicated years.

There is no need to explain how you get the numbers.

	0-14 years		15-64 years		65 years & above	
	M	F	M	F	M	F
2017						
2018						
2019						

For each year and each age group, highlight the sex with the higher rate, and describe briefly any pattern across age groups that persists over the three years.

All the remaining questions are about figures from 2019. You may omit “2019” in your answers.

3. [6] Copy the table below to your document, and fill it with the number of residents in the six groups in 2019. For example, the top left cell should show the number of male residents of age 0-14 years in 2019. Explain how the numbers are calculated from {d3}, by referring to specific cells and computations or EXCEL formulae. The order of appearance of the six numbers in your explanation is up to you. For example, you can first explain how to get the number of male residents of age 65 years & above.

	0-14 years	15-64 years	65 years & above
Male			
Female			

4.[3] (i) Calculate the number of acute care admissions in 2019 for males of 0-14 years, to the nearest integer. Check that the answer is less than 50,000. (ii) Calculate the number of acute care admissions in 2019 for males in the other age groups, to the nearest integer.

5. [3] According to the dataset {d2}, the acute care admission rate for males in 2019 was 135.9 per thousand. Derive this number using your answers to Q4.

6. [3] What was the acute care admission rate for residents aged 65 years or older in 2019?

Extra question, not included in project. Looking at acute care admission rates of residents aged 65 or above in 2019, someone asks

“Is the difference between males (375.4) and females (318.1) statistically significant?”

How would you respond to this question?