

## Singapore Museum Visitors 1

The table below is a **partial** capture of the number of visitors to the different museums in Singapore for the period of 2013 to 2019.

The complete table is available on the LMS as museumvisitors\_dataset.pdf and as museumvisitors\_dataset.csv.

Museum	2013	2014	2015	2016
Asian Civilisations Museum (ACM)	452384	423171	349587	534255
National Museum of Singapore (NMS)	1199031	902083	774555	777362
Singapore Art Museum (SAM)	728978	743718	903357	732913
Singapore Philatelic Museum (SPM)	117466	142106	152655	160034
Sun Yat Sen Nanyang Memorial Hall (SYSNMH)	101544	92287	97335	133159
The Peranakan Museum (TPM)	373929	417057	475728	508334

In this project, your Python program is required to:

- Initialise appropriate lists with the **full** data
- Show four different menu options plus a Quit option.

Based on the user's selection, your program shall

1. Display the visitor numbers of all museums in the year 2014.
2. For the 5-year timespan of 2015 to 2019, display
  - a) the mean number of visitors of the each museum.
  - b) the (mean) value and the name of the museum that has the lowest mean.
3. Of the user's selected year, display the museums and their numbers of visitors, from the highest to the lowest number of visitors.
4. Make the following plots
  - a) Visitor numbers of ACM, TPM vs Year as line plots.
  - b) The lowest to highest number of visitors to NMS vs their sequence number (i.e., 1 – 6 with lowest being 1) as a bar chart.

You will be awarded higher marks based on the quality of your program. Refer to the rubric for more information.

You **should not** use pandas for the project. However, you are allowed to use numpy or other python libraries/modules as needed.

Clarify any doubts about the requirements with your tutor.