

# 01219116/117 Final Examination

## Part 1 (Morning Session)

Second Semester, 2021

### Allowed Materials

The exam is closed book. However, you are allowed to view your own code on your computer and Google Colab for all the assignments after the midterm, as well as the following online resources:

- Python 3.x Documentation
  - <https://docs.python.org/3/>
- Tkinter References
  - Tkinter Class API Reference <https://tkdocs.com/pyref/index.html>
  - John Shipman's Tkinter Ref: <https://tkdocs.com/shipman/> or PDF <https://tkdocs.com/shipman/tkinter.pdf>
  - Tkinter tutorial & ref: <https://python-course.eu/tkinter/>
  - Tkinter tutorial & ref: <https://www.pythontutorial.net/tkinter/>
  - Widget Attributes <https://anzelg.github.io/rin2/book2/2405/docs/tkinter/>
  - Tkinter Docs <https://docs.python.org/3/library/tkinter.html>
  - Tkdocs <https://tkdocs.com> and tutorial <https://tkdocs.com/tutorial>
- Pandas API Reference
  - <https://pandas.pydata.org/pandas-docs/stable/reference/index.html>
- NumPy Reference
  - <https://numpy.org/doc/stable/reference/index.html>
- Matplotlib API Reference
  - <https://matplotlib.org/stable/api/index.html>
- Code examples used during lectures
  - [Lecture 8](#)
  - [Lecture 12](#)

You are also allowed to access [the Final section](#) of Google Classroom, as well as your GitHub repository for this exam part.

### Procedure

1. Disconnect any auxiliary monitors. Use only one monitor during the exam.
2. Turn off your mobile phone and keep it away from your working area.
3. Connect your computer to KUWIN.
4. Join the TAs voice channel on Discord and share your screen. Don't watch anyone else's screen.
5. Start recording a video using OBS or Webex.
6. Start working on the exam as described below.
7. Once you are done, message the TA on Discord and submit your screen recording video.

## Tasks [50 Points]

### Aj.Chaiporn's part [25 points]

- Accept GitHub Classroom assignment at <https://classroom.github.com/a/CXNDXUNG> and follow the instructions described in the README.

### Aj.Piyamate's part [25 points]

- Open the question form at <https://forms.gle/aboDxXKDaNKwQJxT6> and follow the instructions at the beginning of the form.

## Submitting Your Screen Recording Video

1. Rename your video file as *Yourname*-part1.mkv, or *Yourname*-part1.mp4 if you used Webex. Then upload to your Google Drive.
2. Share it with these people:
  - chaiporn.j@ku.th
  - piyamate.w@ku.th
  - poomtun.r@ku.th
  - thanatibordee.s@ku.th
  - vitvara.v@ku.th
  - nabhan.s@ku.th
3. Submit a link to your video on this form: <https://forms.gle/BEzYwQdiJVKTRuAZ7>

If you configured Webex to save your record in the cloud, you may submit the webex link to the form directly.