**KK34803/KP34403**

**Group Assignment 2/Project (20%) – CLO2**

**Due date: 12/6/2022 (Tuesday)**

| Course Learning Outcomes (CLO): At the end of the course the students will be able to: | |
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| CLO1 | Describe how emerging technologies such as actors and functional programming address issues with traditional threads and locks development. (C5, PLO1) |
| **CLO2** | **Demonstrate how to exploit the parallelism in the computer's GPU (P4, PLO2)** |
| CLO3 | Demonstrate how to leverage clusters of machines (C5, PLO6) |

**Task**

1. Work in group (must specify each work by the members in this project).
2. Explore data parallelism in GPU using Google Colab.
3. Prepare the following in a report:
   1. Explain data parallelism.
   2. Explain data parallelism in GPU.
   3. Specify and build a sample code in Python (or other languages that you can run, e.g. C++). It is recommended to use Google Colab and discuss the sample and the results. Carefully explain the source as reference if you use existing samples.
   4. Conclusion.

**Evaluation Rubric**

| **Evaluation** | **Mark/Description** |
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