For 2 hours in the morning, I learned about the visualization tool. First of all, I learned seaborn, a visualization tool that I didn't learn all about yesterday. It is not much different from matplotlib in that it is a visualization tool, but it was amazing that strong performance can be achieved with only a single line of function like sns.pairplot or color_palette. Since seaborn is a library based on matplotlib, there is something in common that you can draw subplots using axes.

In the next chapter, we studied a tool that distributes visualized results with matplotlib or seaborn to other web/apps and connects them when you want to. Plotly and dash are examples. There were several official sites where you could learn how to use the plotly, and the code was also open, so I thought it was highly utilized. When I visualized it through plotly, it was amazing that I could check individual data when I put the mouse on the graph. I was able to understand for sure what an interactive chart was. Finally, I learned the dash library. It was amazing that if I run python files on a jupyter notebook such as anaconda, the dash web server starts and I can view data visualization on the local website. I think dash is endlessly utilized because it can actually be distributed on the web.

After that, I listened to a lecture by an incumbent NOKIA employee. I was able to see what vision NOKIA had and how artificial intelligence was used in companies. After lunch, I visited DASU, an artificial intelligence company. I belatedly noticed that it was right near the accommodation. In groups of 3 people, a total of 6 explanations were heard. I heard the explanation of object detection using wifi detection, an interactive app using a large language model, a diffusion model that generates pictures, teeth that can be used in the medical field and cefalometry 3D analysis, safety helmet, mask, vest detection using yolo, and data analysis linked to a database. In particular, it was impressive that the study related to llm improved the limitations of chat gpt, where training data was unknown, and that artificial intelligence in the medical field made it available to people without medical knowledge. In addition, the image creation task was the most interesting because the result

could be viewed intuitively. It can be seen that there are various fields that can use artificial intelligence, and I am looking forward to selecting the topic in the last week's capstone design class.