## Reflection for Lab1\_grad\_des

Last week, when I learned various machine learning model from datacamp, it was quite challenging and i was really worried that I didn't understand so much. Because I cannot memorize anything if I don't understand. So I was really worried.

But this week, when I learned about fundamental theory of regression from Tchal's lecture, I was a bit relieved and I only need to spend few times on the thing I don't understand(why we set -2X for theta(weight/slope) and -2 for intercept. I asked chatgpt and watched some useful videos. Then I realized it is from derivation from Sum of squared residual. So I rewrite that part in lab notebook using my understanding.

The one thing I still don't understand is why the transpose of residual Y is used in get\_cost() function. I am not quite satisfied with the answer from Chatgpt. It says transpose function is only useful for 2D column vector. My understanding is there is only one target variable in regression. So how can there be 2D column?

The next challenge is homework submission process. Honestly, I don't have any experience before. But the guideline from LMS is quite helpful and I submitted following that guideline and I did it. Thank you Tchal.

Overall, I understood how gradient decent work and the theory behind it. Thank you as always, Tchal and our group mentor who responds timely.