HW2 report

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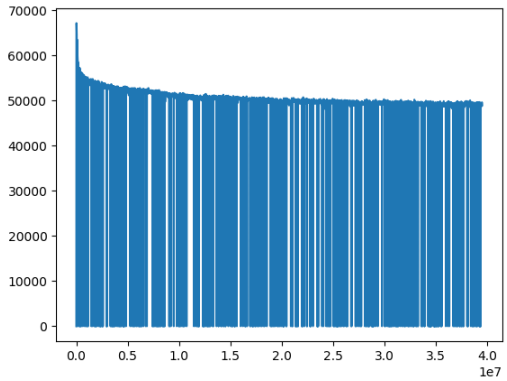
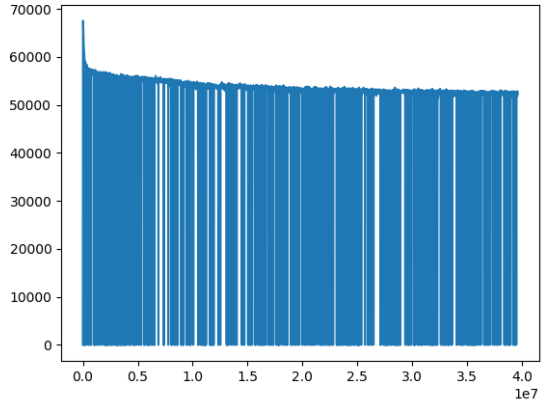
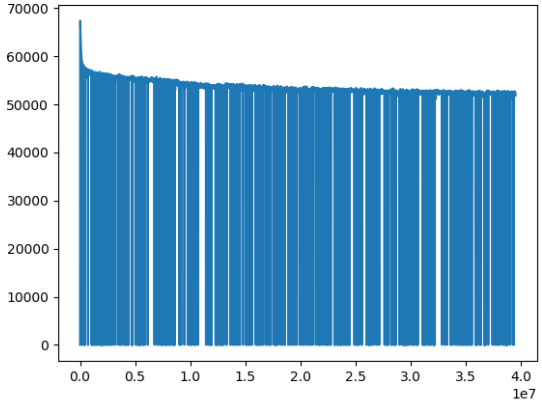
Task 1:

Nll plot for [-2,-1,0,1]



Nll plot for [1,2,3,4] and for [-4,-3,-2,-1]





Conclusion: the final nll result is [-2,-1,0,1] better than [-4,-3,-2,-1] better than [1,2,3,4]; however, generally they produce very similar results.

Task 3

	[-2,-1,1,2]		[-4,-3,-2,-1]		[1,2,3,4]	
target_word	similar_word	similar_score	similar_word	similar_score	similar_word	similar_score
good	**good**	**1**	**good**	**1.00**	**good**	**1.00**
good	interesting	0.54	hope	0.46	nice	0.54
good	decent	0.53	crappy	0.45	decent	0.50
good	terrific	0.52	outstanding	0.44	pleasant	0.48
good	fun	0.51	overshadowed	0.44	fine	0.47
good	passable	0.51	enjoyed	0.44	bad	0.47
good	nice	0.48	watchable	0.43	pretty	0.46
good	okay	0.47	liked	0.43	guys	0.46
good	fine	0.47	promise	0.42	ass	0.46
good	pleasant	0.46	okay	0.42	movie..	0.45
bad	**bad**	**1.00**	**bad**	**1.00**	**bad**	**1.00**
bad	lousy	0.55	uninspired	0.55	good	0.47
bad	sucks	0.52	inept	0.53	fault	0.47
bad	frankly	0.51	terribly	0.52	loved	0.46
bad	abysmal	0.49	embarrassing	0.52	unfortunately	0.44
bad	ugh	0.48	weak	0.51	acting	0.43
bad	acting	0.48	ridiculous	0.51	sloppy	0.43
bad	poor	0.47	thin	0.50	irritating	0.43
bad	crappy	0.47	ok.	0.50	tho	0.43
bad	horrible	0.47	bland	0.50	problem	0.42
scary	**scary**	**1.00**	**scary**	**1.00**	**scary**	**1.00**
scary	creepy	0.62	creepy	0.55	creepy	0.55
scary	terrifying	0.59	gory	0.54	scarier	0.54
scary	spooky	0.58	unsettling	0.53	eerie	0.52
scary	eerie	0.56	neat	0.50	menacing	0.51
scary	frightening	0.55	frightening	0.49	playful	0.48

scary	freaky	0.55	eerie	0.49	shocking	0.47
scary	atmospheric	0.55	suspenseful	0.49	cool	0.47
scary	disturbing	0.51	low-budget	0.47	strange	0.46
scary	tongue-in-cheek	0.51	freaky	0.46	menace	0.46
funny	**funny**	**1.00**	**funny**	**1.00**	**funny**	**1.00**
funny	amusing	0.63	witty	0.58	hilarious	0.52

I label the results which I don't think is good in red. For [-2,-1,1,2], most of the prediction is satisfying, however, while the prediction of the other twos have many unrelated or even opposite results. Thus, the prediction of training model with [-2,-1,1,2] is much better than the others. I guess this this because context words on both sides can give more information about the center word.