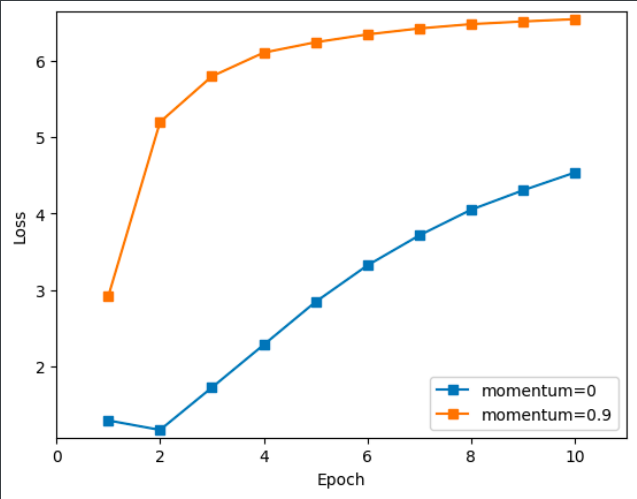
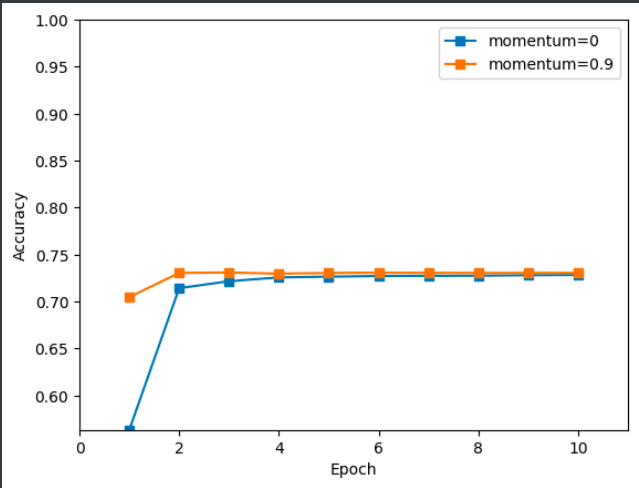


Experimental Report

Graphs



Comparison of Loss in each Epoch



Comparison of Accuracy in each Epoch

Comparison between Different Momentums

Momentum	Aver. Training Acc	Aver. Validation Acc	Final Test Acc
0	0.7324	0.7718	0.7352
0.9	0.7304	0.7710	0.7383

Comparison between Different Learning Rates

Learning Rate	Aver. Training Acc	Aver. Validation Acc	Final Test Acc
0.001	0.7013	0.7416	0.7090
0.01	0.7324	0.7718	0.7352
0.05	0.7301	0.7706	0.7378

Comparison between Different Batch Sizes

Batch Size	Aver. Training Acc	Aver. Validation Acc	Final Test Acc
50	0.7308	0.7714	0.7386
100	0.7324	0.7718	0.7352
200	0.7295	0.7688	0.7355

Conclusion

From the data listed above, we can see that

- Using Momentum can somehow improve the performance.
- Low Learning Rate may have worse performance.
- It is possible to improve performance regardless of whether the Batch Size is small or large.