## CSE-5368-001Neural Networks Spring 2023 Quiz 04

Time: 10 Minutes

| Consider a neural network used for classification using the SVM loss function, the output of the network is | C | onsider a neural | network used | l for classification | using the | SVM loss | function. th | he output of | the network is: |
|---|---|------------------|--------------|----------------------|-----------|----------|--------------|--------------|-----------------|
|---|---|------------------|--------------|----------------------|-----------|----------|--------------|--------------|-----------------|

 $\begin{bmatrix} class \ 1 \ score \\ class \ 2 \ score \\ class \ 3 \ score \end{bmatrix} = \begin{bmatrix} 5 \\ -2 \\ 5.5 \end{bmatrix}$ 

a) If the **target class is class 3**, what is the loss? Assume  $\Delta = 1$ .

| Numerical value of the loss is: |  |
|---------------------------------|--|

b) What would the loss be if the **target was class 2**? Assume  $\Delta = 1$ .

Numerical value of the loss is: