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ECE 408/CS483 Milestone 1 Report

1. Show output of rai running Mini-DNN on the CPU (CPU convolution implemented) for batch size of 1k images. This can either be a screen capture or a text copy of the running output. Please do not show the build output. (The running output should be everything including and after the line "*Loading fashion-mnist data...Done*").

```
Test batch size: 1000
Loading fashion-mnist data...Done
Loading model...Done
Conv-CPU==
Op Time: 8362.89 ms
Conv-CPU==
Op Time: 23928.3 ms

Test Accuracy: 0.886


real    1m21.232s
user    1m21.105s
sys     0m0.120s
```

2. List Op Times (CPU convolution implemented), whole program execution time, and accuracy for batch size of 1k images.

Batch Size	Op Time 1	Op Time 2	Total Execution Time	Accuracy
1000	*8362.89ms*	*23928.3ms*	*1m21.105s*	*0.886*

3. Show percentage of total execution time of your program spent in your forward pass function with 'gprof'. This can either be a screen capture or a text copy of gprof output. You should only include the line that includes your CPU forward pass function *'conv_forward_cpu',* so please do not give more than this line.

```
Each sample counts as 0.01 seconds.
  %   cumulative   self              self     total
 time   seconds   seconds    calls   s/call   s/call  name
 84.02     32.29    32.29        2    16.15    16.15  conv_forward_cpu(float*, float const*, float const*, int, int, int, int, int, int
  1.61     32.91     0.62        2     0.31     2.64  MaxPooling::forward(Eigen::Matrix<float, -1, -1, 0, -1, -1> const&)
```