Procedure for running the "Pong from Pixels"code by Andrej Karpathy

1. First you need to install gym. One way to do this is through the Palmetto Cluster on MobaXterm.
2. After you open the session and log in, just paste the following code,

```
pip install gym
pip install gym[atari]

# To Double-check
pip list
```

3. Go to https://gist.github.com/karpathy/a4166c7fe253700972fcbc77e4ea32c5 for the code
4. Copy the whole code
5. Open Jupyter Hub and start a new, blank page of code
6. You need to make some changes in the code for it to run without any errors
   - For the two print commands at the end, add **parenthesis** starting after 'Print' and ending at the end of the line.

     ```
     # It should look like,
     print('resetting env. episode reward total was %f. running mean: %f' % (reward_sum, running_reward))
     print (('ep %d: game finished, reward: %f' % (episode_number, reward)) + ('' if reward == -1 else ' !!!!!!!!'))
     ```

   - Change **cPickle** at the start of the code to **_pickle**

     ```
     # It should look like,
     import _pickle as pickle
     ```

   - Ctrl+F to find 3 **.iteritems()** and replace them with **.items()**

     ```
     # It should look like,
     grad_buffer = { k : np.zeros_like(v) for k,v in model.items() } # update buffers that add up gradients over a batch
     rmsprop_cache = { k : np.zeros_like(v) for k,v in model.items() } # rmsprop memory

     if episode_number % batch_size == 0:
       for k,v in model.items():
     ```

   - Replace (through Ctrl+F) 1 **xrange()** with **range()**

     ```
     # It should look like,
       for t in reversed(range(0, r.size)):
     ```

7. Change you kernel to SPRI and your code should be good to run.