Assignment 9: Setup Virtual Machine for Parallel Computing with MPI4PY on Google Cloud

(a) Click on SSH terminal (this button can be seen in VM instances page. Look in the right of the line that shows the VM you just created, now type the following commands and see what output you get.

$python3 --version (You should get python3.7.3)

$which mpicc (if done right, this should display /usr/bin/mpicc)

Take a snapshot of the page and rename the image as "question-a.\* (\*jpeg, pdf, etc.) and upload the file with your assignment submission.

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(b) create firstprogram.py (see slide 5 for the program). Use vi editor to enter the program and save it. If you dont know vi editor, GIYF. A few quick commands. $vi firstprogram.py creates an empty file with the filename "firstprogram.py". "i" to insert text, "wq" to write and quit the file. For additional commands, review vi tutorials online. Once the firstprogram.py is ready to use, type the following command in the director that the firstporgram.py is located.

$mpirun -np 2 python3 firstprogam.py

Expected output (the print order may be different from shown below but, you should two lines printed):

myRank is 0 in a group of size 2

myRank is 1 in a group of size 2

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