Prelim Skills Exam

Developing Applications and Automation (CPE028)

A. Creating Virtual Environment (10 points)

1. Create a python 3 virtual environment. Use your name and then DevOps as a virtual

environment name. Example villanueva\_devops

2. Activate the virtual environment.

3. Execute a command to check what packages are installed in the system environment.

4. Create requirements.txt and, then execute a command to install the packages as stated in

the requirements.txt (Note: Install at least four (4) packages)

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B. Create a python Unit Test (15 points) Create at least 4 test cases of the python unit test to test the given python script.

C. Parsing Different Data Types with Python (20 points)

Parse the given JSON / XML file for COVID cases. Retrieve the date reported, countries and

territories, number of cases, and deaths. Create a new CSV file and then save the retrieved data to the CSV file.

D. Git Commands (5 points)

1. Create a repository PRELIM\_SKILLS\_EXAM to your GITHUB account.

2. Upload your files using the GIT command. Make sure to include the necessary comments.