### Get Docker Image for ubuntu 16.04 and create a container with this image ###

>>> docker pull ubuntu:16.04

16.04: Pulling from library/ubuntu

16c48d79e9cc: Pull complete

3c654ad3ed7d: Pull complete

6276f4f9c29d: Pull complete

a4bd43ad48ce: Pull complete

Digest: sha256:6239ca16d54d8edd38788aacde7c6426e5999ffbbd7e97ac3cf04d474341d079

Status: Downloaded newer image for ubuntu:16.04

docker.io/library/ubuntu:16.04

>>> docker images

ubuntu 16.04 657d80a6401d 2 days ago 121MB

>>> docker run -i -t 657d80a6401d

root@cd10f1b6a9b4:/#

### Get inside the above container and create a program for addition in python ###

docker ps -a

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

cd10f1b6a9b4 657d80a6401d "/bin/bash" 24 seconds ago Exited (0) 2 seconds ago cool\_nash

touch pythonexapmle.py

chmod a+x pythonexapmle.py

apt-get update

Get:1 http://security.ubuntu.com/ubuntu xenial-security InRelease [109 kB]

Get:2 http://archive.ubuntu.com/ubuntu xenial InRelease [247 kB]

Get:3 http://security.ubuntu.com/ubuntu xenial-security/main amd64 Packages [956 kB]

Get:4 http://archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]

Get:5 http://archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]

Get:6 http://security.ubuntu.com/ubuntu xenial-security/restricted amd64 Packages [12.7 kB]

Get:7 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [583 kB]

Get:8 http://archive.ubuntu.com/ubuntu xenial/main amd64 Packages [1558 kB]

Get:9 http://security.ubuntu.com/ubuntu xenial-security/multiverse amd64 Packages [6114 B]

Get:10 http://archive.ubuntu.com/ubuntu xenial/restricted amd64 Packages [14.1 kB]

Get:11 http://archive.ubuntu.com/ubuntu xenial/universe amd64 Packages [9827 kB]

Get:12 http://archive.ubuntu.com/ubuntu xenial/multiverse amd64 Packages [176 kB]

Get:13 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [1334 kB]

Get:14 http://archive.ubuntu.com/ubuntu xenial-updates/restricted amd64 Packages [13.1 kB]

Get:15 http://archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [987 kB]

Get:16 http://archive.ubuntu.com/ubuntu xenial-updates/multiverse amd64 Packages [19.1 kB]

Get:17 http://archive.ubuntu.com/ubuntu xenial-backports/main amd64 Packages [7942 B]

Get:18 http://archive.ubuntu.com/ubuntu xenial-backports/universe amd64 Packages [8807 B]

Fetched 16.1 MB in 13s (1168 kB/s)

Reading package lists... Done

apt-get install nano

Reading package lists... Done

Building dependency tree

Reading state information... Done

Suggested packages:

spell

The following NEW packages will be installed:

nano

0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.

Need to get 191 kB of archives.

After this operation, 700 kB of additional disk space will be used.

Get:1 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 nano amd64 2.5.3-2ubuntu2 [191 kB]

Fetched 191 kB in 1s (178 kB/s)

debconf: delaying package configuration, since apt-utils is not installed

Selecting previously unselected package nano.

(Reading database ... 4777 files and directories currently installed.)

Preparing to unpack .../nano\_2.5.3-2ubuntu2\_amd64.deb ...

Unpacking nano (2.5.3-2ubuntu2) ...

Setting up nano (2.5.3-2ubuntu2) ...

update-alternatives: using /bin/nano to provide /usr/bin/editor (editor) in auto mode

update-alternatives: using /bin/nano to provide /usr/bin/pico (pico) in auto mode

nano pythonexapmle.py

a = int(input("enter first number: "))

b = int(input("enter second number: "))

sum = a + b

print("sum:", sum)

apt-get install python

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following additional packages will be installed:

file libexpat1 libffi6 libmagic1 libpython-stdlib libpython2.7-minimal

libpython2.7-stdlib libsqlite3-0 libssl1.0.0 mime-support python-minimal

python2.7 python2.7-minimal

Suggested packages:

python-doc python-tk python2.7-doc binutils binfmt-support

The following NEW packages will be installed:

file libexpat1 libffi6 libmagic1 libpython-stdlib libpython2.7-minimal

libpython2.7-stdlib libsqlite3-0 libssl1.0.0 mime-support python

python-minimal python2.7 python2.7-minimal

0 upgraded, 14 newly installed, 0 to remove and 0 not upgraded.

Need to get 5720 kB of archives.

After this operation, 25.7 MB of additional disk space will be used.

Do you want to continue? [Y/n] y

Get:1 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libpython2.7-minimal amd64 2.7.12-1ubuntu0~16.04.8 [339 kB]

Get:2 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 python2.7-minimal amd64 2.7.12-1ubuntu0~16.04.8 [1261 kB]

Get:3 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 python-minimal amd64 2.7.12-1~16.04 [28.1 kB]

Get:4 http://archive.ubuntu.com/ubuntu xenial/main amd64 mime-support all 3.59ubuntu1 [31.0 kB]

Get:5 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libexpat1 amd64 2.1.0-7ubuntu0.16.04.5 [71.5 kB]

Get:6 http://archive.ubuntu.com/ubuntu xenial/main amd64 libffi6 amd64 3.2.1-4 [17.8 kB]

Get:7 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libsqlite3-0 amd64 3.11.0-1ubuntu1.2 [397 kB]

Get:8 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libssl1.0.0 amd64 1.0.2g-1ubuntu4.15 [1084 kB]

Get:9 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libpython2.7-stdlib amd64 2.7.12-1ubuntu0~16.04.8 [1885 kB]

Get:10 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 python2.7 amd64 2.7.12-1ubuntu0~16.04.8 [224 kB]

Get:11 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libpython-stdlib amd64 2.7.12-1~16.04 [7768 B]

Get:12 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 python amd64 2.7.12-1~16.04 [137 kB]

Get:13 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 libmagic1 amd64 1:5.25-2ubuntu1.2 [216 kB]

Get:14 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 file amd64 1:5.25-2ubuntu1.2 [21.2 kB]

Fetched 5720 kB in 14s (404 kB/s)

debconf: delaying package configuration, since apt-utils is not installed

Selecting previously unselected package libpython2.7-minimal:amd64.

(Reading database ... 4841 files and directories currently installed.)

Preparing to unpack .../libpython2.7-minimal\_2.7.12-1ubuntu0~16.04.8\_amd64.deb ...

Unpacking libpython2.7-minimal:amd64 (2.7.12-1ubuntu0~16.04.8) ...

Selecting previously unselected package python2.7-minimal.

Preparing to unpack .../python2.7-minimal\_2.7.12-1ubuntu0~16.04.8\_amd64.deb ...

Unpacking python2.7-minimal (2.7.12-1ubuntu0~16.04.8) ...

Selecting previously unselected package python-minimal.

Preparing to unpack .../python-minimal\_2.7.12-1~16.04\_amd64.deb ...

Unpacking python-minimal (2.7.12-1~16.04) ...

Selecting previously unselected package mime-support.

Preparing to unpack .../mime-support\_3.59ubuntu1\_all.deb ...

Unpacking mime-support (3.59ubuntu1) ...

Selecting previously unselected package libexpat1:amd64.

Preparing to unpack .../libexpat1\_2.1.0-7ubuntu0.16.04.5\_amd64.deb ...

Unpacking libexpat1:amd64 (2.1.0-7ubuntu0.16.04.5) ...

Selecting previously unselected package libffi6:amd64.

Preparing to unpack .../libffi6\_3.2.1-4\_amd64.deb ...

Unpacking libffi6:amd64 (3.2.1-4) ...

Selecting previously unselected package libsqlite3-0:amd64.

Preparing to unpack .../libsqlite3-0\_3.11.0-1ubuntu1.2\_amd64.deb ...

Unpacking libsqlite3-0:amd64 (3.11.0-1ubuntu1.2) ...

Selecting previously unselected package libssl1.0.0:amd64.

Preparing to unpack .../libssl1.0.0\_1.0.2g-1ubuntu4.15\_amd64.deb ...

Unpacking libssl1.0.0:amd64 (1.0.2g-1ubuntu4.15) ...

Selecting previously unselected package libpython2.7-stdlib:amd64.

Preparing to unpack .../libpython2.7-stdlib\_2.7.12-1ubuntu0~16.04.8\_amd64.deb ...

Unpacking libpython2.7-stdlib:amd64 (2.7.12-1ubuntu0~16.04.8) ...

Selecting previously unselected package python2.7.

Preparing to unpack .../python2.7\_2.7.12-1ubuntu0~16.04.8\_amd64.deb ...

Unpacking python2.7 (2.7.12-1ubuntu0~16.04.8) ...

Selecting previously unselected package libpython-stdlib:amd64.

Preparing to unpack .../libpython-stdlib\_2.7.12-1~16.04\_amd64.deb ...

Unpacking libpython-stdlib:amd64 (2.7.12-1~16.04) ...

Processing triggers for libc-bin (2.23-0ubuntu11) ...

Setting up libpython2.7-minimal:amd64 (2.7.12-1ubuntu0~16.04.8) ...

Setting up python2.7-minimal (2.7.12-1ubuntu0~16.04.8) ...

Linking and byte-compiling packages for runtime python2.7...

Setting up python-minimal (2.7.12-1~16.04) ...

Selecting previously unselected package python.

(Reading database ... 5652 files and directories currently installed.)

Preparing to unpack .../python\_2.7.12-1~16.04\_amd64.deb ...

Unpacking python (2.7.12-1~16.04) ...

Selecting previously unselected package libmagic1:amd64.

Preparing to unpack .../libmagic1\_1%3a5.25-2ubuntu1.2\_amd64.deb ...

Unpacking libmagic1:amd64 (1:5.25-2ubuntu1.2) ...

Selecting previously unselected package file.

Preparing to unpack .../file\_1%3a5.25-2ubuntu1.2\_amd64.deb ...

Unpacking file (1:5.25-2ubuntu1.2) ...

Processing triggers for libc-bin (2.23-0ubuntu11) ...

Setting up mime-support (3.59ubuntu1) ...

Setting up libexpat1:amd64 (2.1.0-7ubuntu0.16.04.5) ...

Setting up libffi6:amd64 (3.2.1-4) ...

Setting up libsqlite3-0:amd64 (3.11.0-1ubuntu1.2) ...

Setting up libssl1.0.0:amd64 (1.0.2g-1ubuntu4.15) ...

debconf: unable to initialize frontend: Dialog

debconf: (No usable dialog-like program is installed, so the dialog based frontend cannot be used. at /usr/share/perl5/Debconf/FrontEnd/Dialog.pm line 76.)

debconf: falling back to frontend: Readline

debconf: unable to initialize frontend: Readline

debconf: (Can't locate Term/ReadLine.pm in @INC (you may need to install the Term::ReadLine module) (@INC contains: /etc/perl /usr/local/lib/x86\_64-linux-gnu/perl/5.22.1 /usr/local/share/perl/5.22.1 /usr/lib/x86\_64-linux-gnu/perl5/5.22 /usr/share/perl5 /usr/lib/x86\_64-linux-gnu/perl/5.22 /usr/share/perl/5.22 /usr/local/lib/site\_perl /usr/lib/x86\_64-linux-gnu/perl-base .) at /usr/share/perl5/Debconf/FrontEnd/Readline.pm line 7.)

debconf: falling back to frontend: Teletype

Setting up libpython2.7-stdlib:amd64 (2.7.12-1ubuntu0~16.04.8) ...

Setting up python2.7 (2.7.12-1ubuntu0~16.04.8) ...

Setting up libpython-stdlib:amd64 (2.7.12-1~16.04) ...

Setting up python (2.7.12-1~16.04) ...

Setting up libmagic1:amd64 (1:5.25-2ubuntu1.2) ...

Setting up file (1:5.25-2ubuntu1.2) ...

Processing triggers for libc-bin (2.23-0ubuntu11) ...

python –version

Python 2.7.12

### Run program on docker(*To run this program you may need to install python on docker*) ###

python pythonexapmle.py

enter first number: 2

enter second number: 3

('sum:', 5)