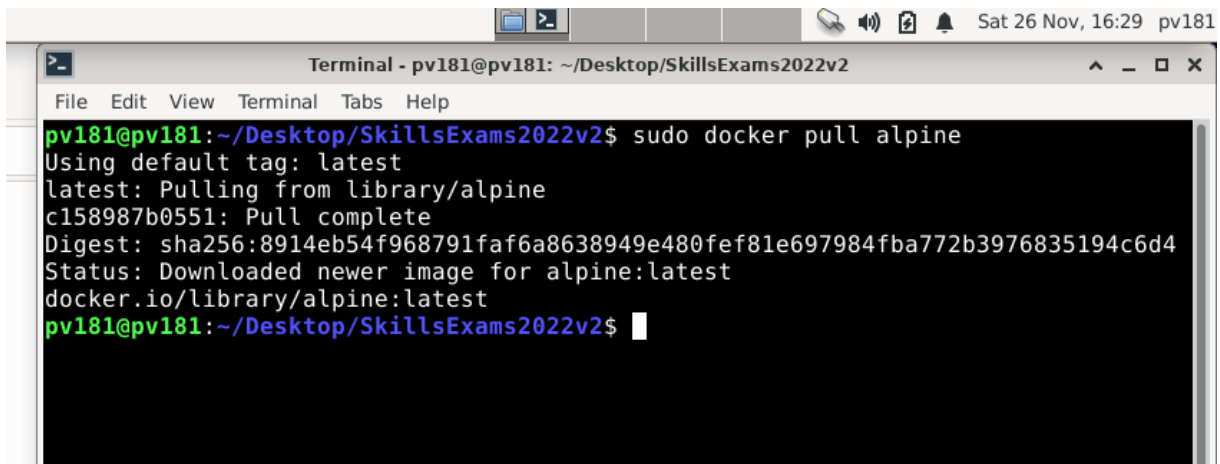


## Task 3: The Alpine Docker Container

### Step 1: Pull and Run the Alpine Image

To run the Alpine Image Docker Container, you can use the Docker run command.

***sudo docker run -it alpine:3***                      ***or***                      ***sudo docker pull alpine***

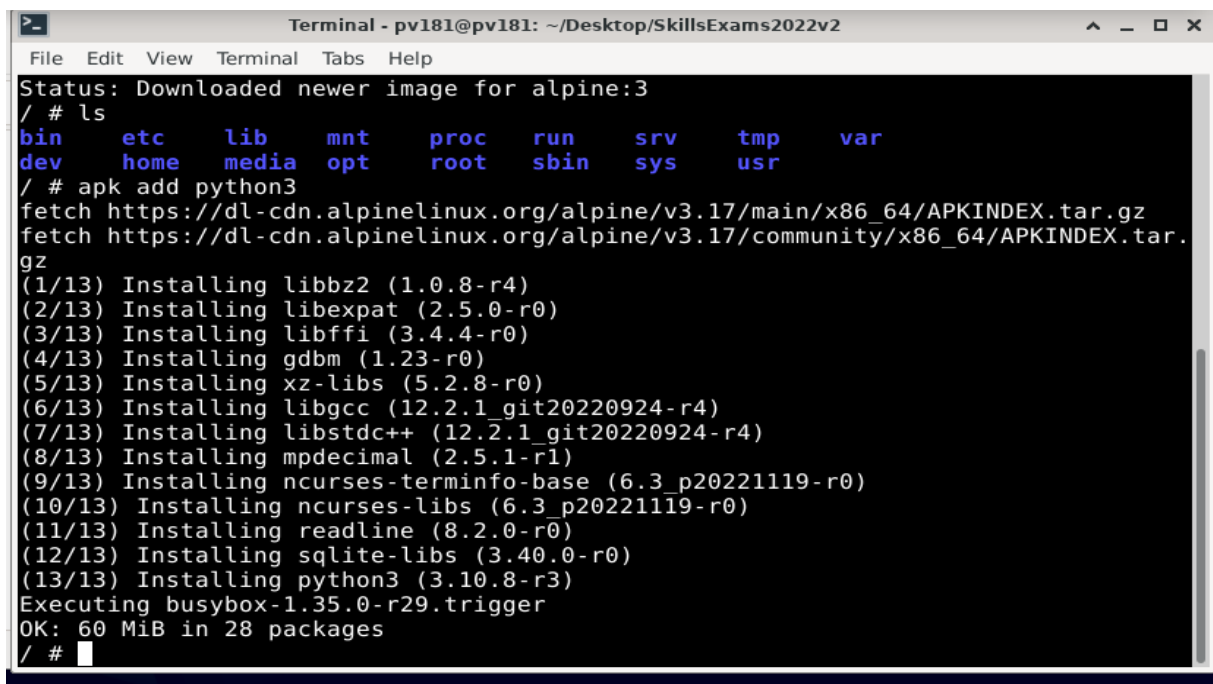


```
Terminal - pv181@pv181: ~/Desktop/SkillsExams2022v2
File Edit View Terminal Tabs Help
pv181@pv181:~/Desktop/SkillsExams2022v2$ sudo docker pull alpine
Using default tag: latest
latest: Pulling from library/alpine
c158987b0551: Pull complete
Digest: sha256:8914eb54f968791faf6a8638949e480fef81e697984fba772b3976835194c6d4
Status: Downloaded newer image for alpine:latest
docker.io/library/alpine:latest
pv181@pv181:~/Desktop/SkillsExams2022v2$
```

### Step 2: Install Python 3

To install python 3 inside the Alpine Container, you can use the apk add command inside the shell.

***apk add python3***



```
Terminal - pv181@pv181: ~/Desktop/SkillsExams2022v2
File Edit View Terminal Tabs Help
Status: Downloaded newer image for alpine:3
/ # ls
bin      etc      lib      mnt      proc     run      srv      tmp      var
dev      home    media    opt      root     sbin     sys      usr
/ # apk add python3
fetch https://dl-cdn.alpinelinux.org/alpine/v3.17/main/x86_64/APKINDEX.tar.gz
fetch https://dl-cdn.alpinelinux.org/alpine/v3.17/community/x86_64/APKINDEX.tar.gz
(1/13) Installing libbz2 (1.0.8-r4)
(2/13) Installing libexpat (2.5.0-r0)
(3/13) Installing libffi (3.4.4-r0)
(4/13) Installing gdbm (1.23-r0)
(5/13) Installing xz-libs (5.2.8-r0)
(6/13) Installing libgcc (12.2.1_git20220924-r4)
(7/13) Installing libstdc++ (12.2.1_git20220924-r4)
(8/13) Installing mpdecimal (2.5.1-r1)
(9/13) Installing ncurses-terminfo-base (6.3_p20221119-r0)
(10/13) Installing ncurses-libs (6.3_p20221119-r0)
(11/13) Installing readline (8.2.0-r0)
(12/13) Installing sqlite-libs (3.40.0-r0)
(13/13) Installing python3 (3.10.8-r3)
Executing busybox-1.35.0-r29.trigger
OK: 60 MiB in 28 packages
/ #
```

#### Step 4: Install Firefox

To install Firefox inside the Container, you can use the following command.

***apk add firefox***

```
Terminal - pv181@pv181: ~/Desktop/SkillsExams2022v2
File Edit View Terminal Tabs Help
Executing busybox-1.35.0-r29.trigger
OK: 60 MiB in 28 packages
/ # apk add firefox
(1/110) Installing sdl2 (2.26.0-r0)
(2/110) Installing svt-av1-libs (1.3.0-r0)
(3/110) Installing libxau (1.0.10-r0)
(4/110) Installing libmd (1.0.4-r0)
(5/110) Installing libbsd (0.11.7-r0)
(6/110) Installing libxdmcp (1.1.4-r0)
(7/110) Installing libxcb (1.15-r0)
(8/110) Installing libx11 (1.8.2-r0)
(9/110) Installing aom-libs (3.5.0-r0)
(10/110) Installing alsa-lib (1.2.8-r0)
(11/110) Installing brotli-libs (1.0.9-r9)
(12/110) Installing libpng (1.6.38-r0)
(13/110) Installing freetype (2.12.1-r0)
(14/110) Installing fontconfig (2.14.1-r0)
(15/110) Installing fridibi (1.0.12-r0)
(16/110) Installing libintl (0.21.1-r1)
(17/110) Installing libblkid (2.38.1-r0)
(18/110) Installing libmount (2.38.1-r0)
(19/110) Installing pcrc2 (10.40-r0)
(20/110) Installing glib (2.74.2-r0)
(21/110) Installing graphite2 (1.3.14-r2)
(22/110) Installing harfbuzz (5.3.1-r1)
(23/110) Installing libass (0.16.0-r0)
(24/110) Installing libdav1d (1.0.0-r2)
(25/110) Installing hwdata-pci (0.364-r0)
```

#### Step 5: verify by listing the images.

***sudo docker images***

```
Terminal - pv181@pv181: ~/Desktop/SkillsExams2022v2
File Edit View Terminal Tabs Help
Executing busybox-1.35.0-r29.trigger
Executing glib-2.74.2-r0.trigger
Executing shared-mime-info-2.2-r2.trigger
Executing gdk-pixbuf-2.42.10-r0.trigger
Executing gtk-update-icon-cache-3.24.34-r7.trigger
OK: 406 MiB in 138 packages
/ # q
/bin/sh: q: not found
/ # exit
pv181@pv181:~/Desktop/SkillsExams2022v2$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
alpine        3         49176f190c7e   3 days ago    7.05MB
alpine        latest    49176f190c7e   3 days ago    7.05MB
hello-world   latest    feb5d9fea6a5   14 months ago 13.3kB
pv181@pv181:~/Desktop/SkillsExams2022v2$ sudo docker run alpine
pv181@pv181:~/Desktop/SkillsExams2022v2$ sudo docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS          NAMES
ec75842a73da   alpine    "/bin/sh"               41 seconds ago Exited (0)    39 seconds ago          magical_gates
269964c07db7   alpine:3  "/bin/sh"               4 minutes ago Exited (127)  About a minute ago      elated_mayer
0c0db04ff091   alpine    "/bin/sh"               5 minutes ago Exited (0)    5 minutes ago          determined_montalcini
pv181@pv181:~/Desktop/SkillsExams2022v2$ sudo docker run -it alpine:3
/ # ls
bin    dev    etc    home   lib    media  mnt    opt    proc   root   run    sbin   srv    sys    tmp    usr    var
/ # exit
```

#### Showing alpine server as the latest Repository

```
pv181@pv181:~/Desktop/SkillsExams2022v2$ sudo docker commit 269964c07db7 alpine-server
sha256:22051cfa6871d5f0ccid192426104bb8eab10067544ccdb1889dbdc38476994
pv181@pv181:~/Desktop/SkillsExams2022v2$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
alpine-server  latest    22051cfa6871   56 seconds ago 418MB
alpine        3         49176f190c7e   3 days ago    7.05MB
alpine        latest    49176f190c7e   3 days ago    7.05MB
hello-world   latest    feb5d9fea6a5   14 months ago 13.3kB
pv181@pv181:~/Desktop/SkillsExams2022v2$
```