

Lab 3 Submission

Question 1



```

1/1 + [Icons] Tilix: jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~
1: jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~ 2: jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~
.. Unpacking libSDL2-ttf-2.0-0:amd64 (2.22.0+dfsg
Selecting previously unselected package libSDL1-1) ...
.2debian:amd64. Selecting previously unselected package blocka
Preparing to unpack .../5-libSDL1.2debian_1.2.6ttack.
8-2_amd64.deb ... Preparing to unpack .../10-blockattack_2.8.0-1
Unpacking libSDL1.2debian:amd64 (1.2.68-2) ... build1_amd64.deb ...
Selecting previously unselected package libSDL- Unpacking blockattack (2.8.0-1build1) ...
mixer1.2:amd64. Setting up libSDL2-image-2.0-0:amd64 (2.8.2+df
Preparing to unpack .../6-libSDL-mixer1.2_1.2.1sg-1build2) ...
2-18_amd64.deb ... Setting up libmodplug1:amd64 (1:0.8.9.0-3build
Unpacking libSDL-mixer1.2:amd64 (1.2.12-18) ... 1) ...
Selecting previously unselected package cuyo. Setting up libphysfs1:amd64 (3.0.2-6build2) ..
Preparing to unpack .../7-cuyo_2.1.0-1build1_am. Setting up libfmt9:amd64 (9.1.0+ds1-2) ...
d64.deb ... Setting up libSDL2-ttf-2.0-0:amd64 (2.22.0+dfs
Unpacking cuyo (2.1.0-1build1) ... g-1) ...
Selecting previously unselected package blockou Setting up timgm6mb-soundfont (1.3-5) ...
t2. update-alternatives: using /usr/share/sounds/s
Preparing to unpack .../8-blockout2_2.5+dfsg1-1 f2/TimGM6mb.sf2 to provide /usr/share/sounds/s
build3_amd64.deb ... f2/default-GM.sf2 (default-GM.sf2) in auto mod
Unpacking blockout2 (2.5+dfsg1-1build3) ...
Setting up libSDL1.2debian:amd64 (1.2.68-2) ... e
Setting up cuyo-data (2.1.0-1build1) ... update-alternatives: using /usr/share/sounds/s
Setting up libsndio7.0:amd64 (1.9.0-0.3build3) f2/TimGM6mb.sf2 to provide /usr/share/sounds/s
... f3/default-GM.sf3 (default-GM.sf3) in auto mod
Setting up libopenal-data (1:1.23.1-4build1) .. e
. Setting up libopusfile0:amd64 (0.12-4build3) .
Setting up libopenal1:amd64 (1:1.23.1-4build1) ..
... Setting up libinstpatch-1.0-2:amd64 (1.1.6-1bu
Setting up libmikmod3:amd64 (3.3.11.1-7build1) ild2) ...
... Setting up libfluidsynth3:amd64 (2.3.4-1build3
Setting up libSDL-mixer1.2:amd64 (1.2.12-18) ..) ...
. Setting up libSDL2-mixer-2.0-0:amd64 (2.8.0+df
Setting up cuyo (2.1.0-1build1) ... sg-1build3) ...
Setting up blockout2 (2.5+dfsg1-1build3) ... Setting up blockattack (2.8.0-1build1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ... Processing triggers for hicolor-icon-theme (0.
7-2) ... 17-2) ...
Processing triggers for gnome-menus (3.36.0-1.1ubuntu3) ... Processing triggers for gnome-menus (3.36.0-1.
ubuntu3) ... 1ubuntu3) ...
Processing triggers for libc-bin (2.39-0ubuntu8.6) ... Processing triggers for libc-bin (2.39-0ubuntu
8.6) ...
Processing triggers for man-db (2.12.0-4build2) ... Processing triggers for man-db (2.12.0-4build2
) ...
Processing triggers for desktop-file-utils (0.27-2build1) ... Processing triggers for desktop-file-utils (0.
7-2build1) ...
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$ jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$

```

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1/1 + [T] [C] Tilix: jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~
1:jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~ 2:jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~
Setting up blockout2 (2.5+dfsg1-1build3) ... f2/TimGM6mb.sf2 to provide /usr/share/sounds/s
Processing triggers for hicolor-icon-theme (0.1f3/default-GM.sf3 (default-GM.sf3) in auto mod
7-2) ... e
Processing triggers for gnome-menus (3.36.0-1.1Setting up libopusfile0:amd64 (0.12-4build3) .
ubuntu3) ... ..
Processing triggers for libc-bin (2.39-0ubuntu8Setting up libinstpatch-1.0-2:amd64 (1.1.6-1bu
.6) ... ild2) ...
Processing triggers for man-db (2.12.0-4build2Setting up libfluidsynth3:amd64 (2.3.4-1build3
... ) ...
Processing triggers for desktop-file-utils (0.2Setting up libsndl2-mixer-2.0-0:amd64 (2.8.0+df
7-2build1) ... sg-1build3) ...
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$ sudo apt remove puyo
Processing triggers for hicolor-icon-theme (0.
Reading package lists... Done 17-2) ...
Building dependency tree... Done Processing triggers for gnome-menus (3.36.0-1.
Reading state information... Done 1ubuntu3) ...
E: Unable to locate package puyo Processing triggers for libc-bin (2.39-0ubuntu
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$ 8.6) ...
sudo apt remove cuyo Processing triggers for man-db (2.12.0-4build2
Reading package lists... Done ) ...
Building dependency tree... Done Processing triggers for desktop-file-utils (0.
Reading state information... Done 27-2build1) ...
The following packages were automatically insta
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~
lled and are no longer required: $ sudo apt purge cuyo
cuyo-data libfmt9 libmodplug1 libopusfile0 Reading package lists... Done
libphysfs1 libsdl2-image-2.0-0 Building dependency tree... Done
libsdl2-mixer-2.0-0 libsdl2-ttf-2.0-0 Reading state information... Done
Use 'sudo apt autoremove' to remove them. The following packages were automatically inst
The following packages will be REMOVED: alled and are no longer required:
cuyo cuyo-data libfmt9 libmodplug1 libopusfile0
0 upgraded, 0 newly installed, 1 to remove and libphysfs1 libsdl2-image-2.0-0
18 not upgraded. libsdl2-mixer-2.0-0 libsdl2-ttf-2.0-0
After this operation, 437 kB disk space will beUse 'sudo apt autoremove' to remove them.
freed. The following packages will be REMOVED:
Do you want to continue? [Y/n] y cuyo*
(Reading database ... 269449 files and director0 upgraded, 0 newly installed, 1 to remove and
ies currently installed.) 18 not upgraded.
Removing cuyo (2.1.0-1build1) ... After this operation, 0 B of additional disk s
Processing triggers for hicolor-icon-theme (0.1pace will be used.
7-2) ... Do you want to continue? [Y/n] y
Processing triggers for gnome-menus (3.36.0-1.1(Reading database ... 269441 files and directo
ubuntu3) ... ries currently installed.)
Processing triggers for desktop-file-utils (0.2Purging configuration files for cuyo (2.1.0-1b
7-2build1) ... uild1) ...
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$ jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~
$

```

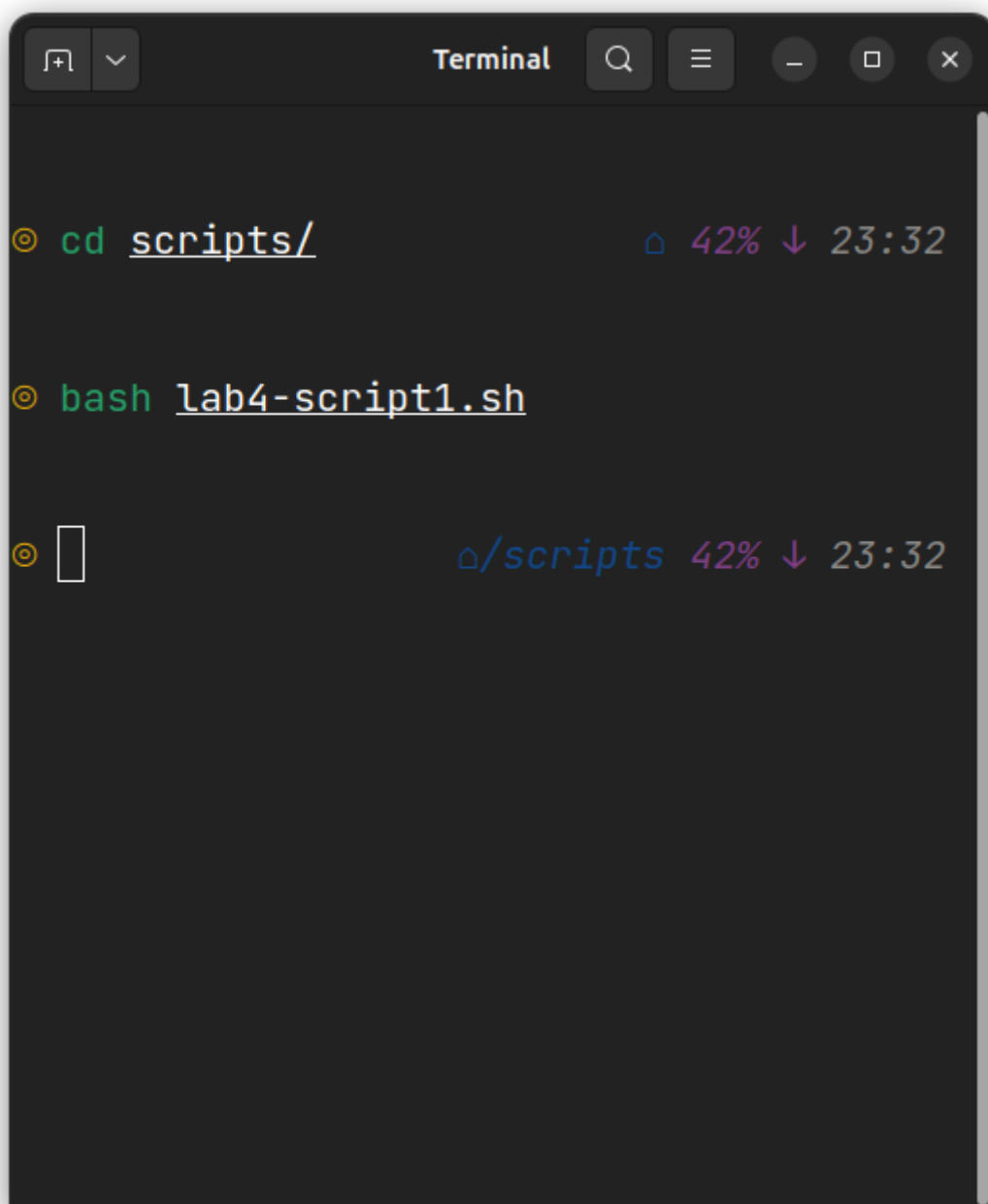
```

Tilix: jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~
1: jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~
Processing triggers for gnome-menus (3.36.0-1.1ubuntu3) ...
Processing triggers for desktop-file-utils (0.27-2build1) ...
Setting up libopusfile0:amd64 (0.12-4build3) .
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$ ..
sudo apt clean && sudo apt autoclean && sudo apt autoremove && sudo apt autopurge
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages will be REMOVED:
  cuyo-data libfmt9 libmodplug1 libopusfile0
  libphysfs1 libSDL2-image-2.0-0
  libSDL2-mixer-2.0-0 libSDL2-ttf-2.0-0
0 upgraded, 0 newly installed, 8 to remove and
18 not upgraded.
After this operation, 7,071 kB disk space will
be freed.
Do you want to continue? [Y/n] y
(Reading database ... 269441 files and director
ies currently installed.)
Removing cuyo-data (2.1.0-1build1) ...
Removing libfmt9:amd64 (9.1.0+ds1-2) ...
Removing libSDL2-mixer-2.0-0:amd64 (2.8.0+dfsg-1build3) ...
Removing libmodplug1:amd64 (1:0.8.9.0-3build1) ...
Removing libopusfile0:amd64 (0.12-4build3) ...
Removing libphysfs1:amd64 (3.0.2-6build2) ...
Removing libSDL2-image-2.0-0:amd64 (2.8.2+dfsg-1build2) ...
Removing libSDL2-ttf-2.0-0:amd64 (2.22.0+dfsg-1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.6) ...
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
0 upgraded, 0 newly installed, 0 to remove and
18 not upgraded.
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$

2: jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx: ~
f2/TimGM6mb.sf2 to provide /usr/share/sounds/sf3/default-GM.sf3 (default-GM.sf3) in auto mod
Setting up libinstpatch-1.0-2:amd64 (1.1.6-1build2) ...
Setting up libfluidsynth3:amd64 (2.3.4-1build3) ...
Setting up libSDL2-mixer-2.0-0:amd64 (2.8.0+dfsg-1build3) ...
Setting up blockattack (2.8.0-1build1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1.1ubuntu3) ...
Processing triggers for libc-bin (2.39-0ubuntu8.6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for desktop-file-utils (0.27-2build1) ...
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$ sudo apt purge cuyo
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  cuyo-data libfmt9 libmodplug1 libopusfile0
  libphysfs1 libSDL2-image-2.0-0
  libSDL2-mixer-2.0-0 libSDL2-ttf-2.0-0
Use 'sudo apt autoremove' to remove them.
The following packages will be REMOVED:
  cuyo*
0 upgraded, 0 newly installed, 1 to remove and
18 not upgraded.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] y
(Reading database ... 269441 files and directories currently installed.)
Purging configuration files for cuyo (2.1.0-1build1) ...
jay@jay-HP-Envy-x360-2-in-1-Laptop-14-fc0xxx:~$

```

Question 2



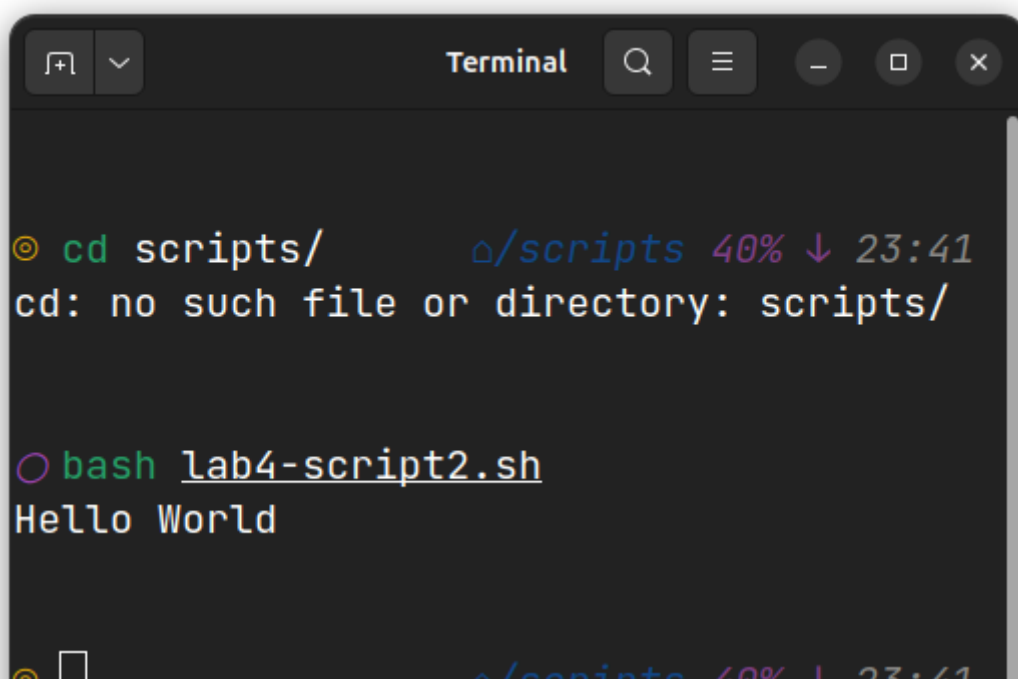
```
Terminal
```

```
⌘ cd scripts/ 42% ↓ 23:32
```

```
⌘ bash lab4-script1.sh
```

```
⌘ 42% ↓ 23:32
```

A terminal window with a dark background. The title bar says "Terminal". The first command is `cd scripts/`, which is followed by a status bar showing a home icon, `42%`, a downward arrow, and `23:32`. The second command is `bash lab4-script1.sh`. The third command is an empty prompt, followed by a status bar showing `42%`, a downward arrow, and `23:32`.



```
Terminal
```

```
⌘ cd scripts/ 40% ↓ 23:41
```

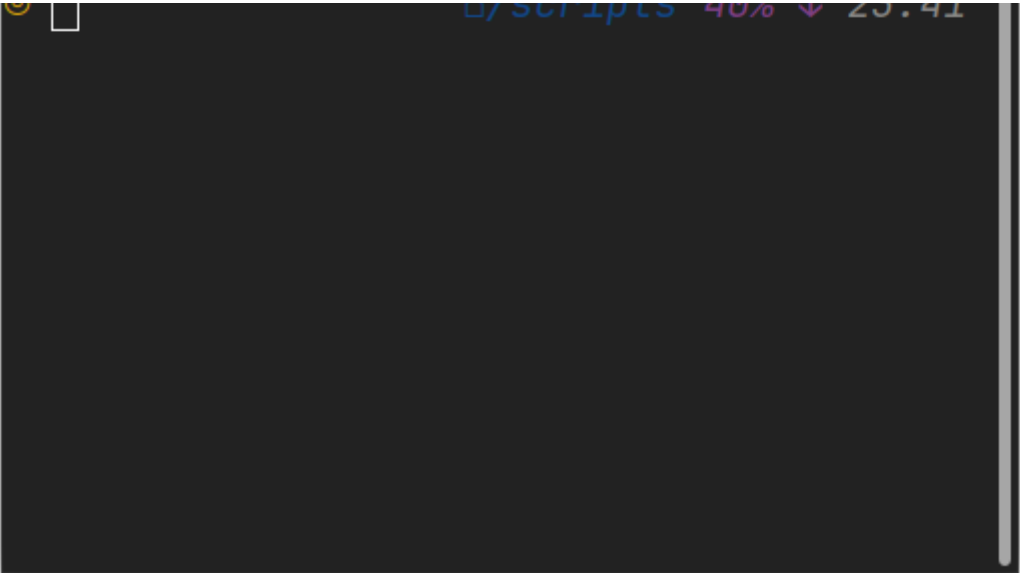
```
cd: no such file or directory: scripts/
```

```
⌘ bash lab4-script2.sh
```

```
Hello World
```

```
⌘ 40% ↓ 23:41
```

A terminal window with a dark background. The title bar says "Terminal". The first command is `cd scripts/`, which is followed by a status bar showing a home icon, `40%`, a downward arrow, and `23:41`. The second command is `cd: no such file or directory: scripts/`. The third command is `bash lab4-script2.sh`, which is followed by the output `Hello World`. The fourth command is an empty prompt, followed by a status bar showing `40%`, a downward arrow, and `23:41`.



```
Terminal
cd scripts/
cd: no such file or directory: scripts/

bash lab4-script2.sh
Hello World

bash lab4-script3.sh
today's date is:
Wed Oct 22 11:55:51 PM EDT 2025

The current user is: jay

Memory usage:
total      used      free      shared  buff/cache  available
Mem:      156i      4.16i      6.76i      829Mi      5.46i      106i
Swap:      4.06i          0B      4.06i
```

```
lab4-script3.sh - /home/jay/scripts - Geany
File Edit Search View Document Project Build Tools Help
o symbols found
1 #!/bin/bash
2 echo "today's date is:"
3 date
4
5 echo ""
6 echo -n "The current user is: "
7 whoami
8
9 echo "
10 echo "Memory usage:"
11 free -h
12
13
```

Challenge Question

[illegible]

```
challenge_lab4.sh
~/cis106/labs/lab4

1 #!/bin/bash
2 echo "_____ "
3
4 figlet System
5
6 echo "DATE UTC:    $(date -u +"%m/%d/%y %H:%M:%S")"
7 echo "HOSTNAME:    $(hostname)"
8 echo "UPTIME:       $(uptime -p)"
9 echo "USER:         $(whoami)"
10
```

```
11 echo
12 figlet MEMORY
13
14 free -h
15
16 echo
17 figlet DISK
18
19 df -h --output=source,size,used,avail,pcent,target | grep '^/dev'
20
21 #why did i struggle with this????
22 #forums are king
```

Challenge Question Script Source code:

[lab4](#)