

CPSC 240 Computer Organization and Assembly Language

Debug

First Program

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Open Ubuntu Tuffix on VCL



a. Search "Virtual" in Portal, and click "Virtual Computing Lab".

The screenshot shows the CSUF Portal dashboard. At the top, the browser tab is labeled "CSUF Portal" and the address bar shows "my.fullerton.edu/Portal/Dashboard/". The left sidebar contains the user profile for "Yitsen (joshua) /Faculty/Staff/Alu..." and a search bar with the text "virtual". Below the search bar, the "Apps" tab is selected, showing a list of "USER APPS". The "Virtual Computing Lab" app is highlighted with a red box. The main content area displays a grid of "Tiles" for various services: Canvas, Titan Advisors Network Employee, Titan Online, Health Portal / Vaccination, DropBox for Employee, Interfolio, Canvas Student Engagement Faculty, and LinkedIn Learning. A red banner at the bottom indicates a "Portal Message".

CSUF Portal

Yitsen (joshua)
/Faculty/Staff/Alu...

virtual

Apps Favorite History

USER APPS

Virtual Computing Lab

Tiles

- Canvas
- Titan Advisors Network Employee
- Titan Online
- Health Portal / Vaccination
- DropBox for Employee
- Interfolio
- Canvas Student Engagement Faculty
- LinkedIn Learning



Portal Message



b. Click "Proceed to Login" in the Virtual Computing Lab.

CSUF Portal - Home x VCL :: Virtual Computing Lab x +

← → ↻ 🔒 vcl-i2.fullerton.edu/vcl/index.php?mode=selectauth ☆ ⚙️ 👤 ⋮



Welcome to the Virtual Computing Lab

Please select an authentication method to use:

CSUF Login ▾

☐ Remember my selection

Proceed to Login

Explanation of authentication methods:

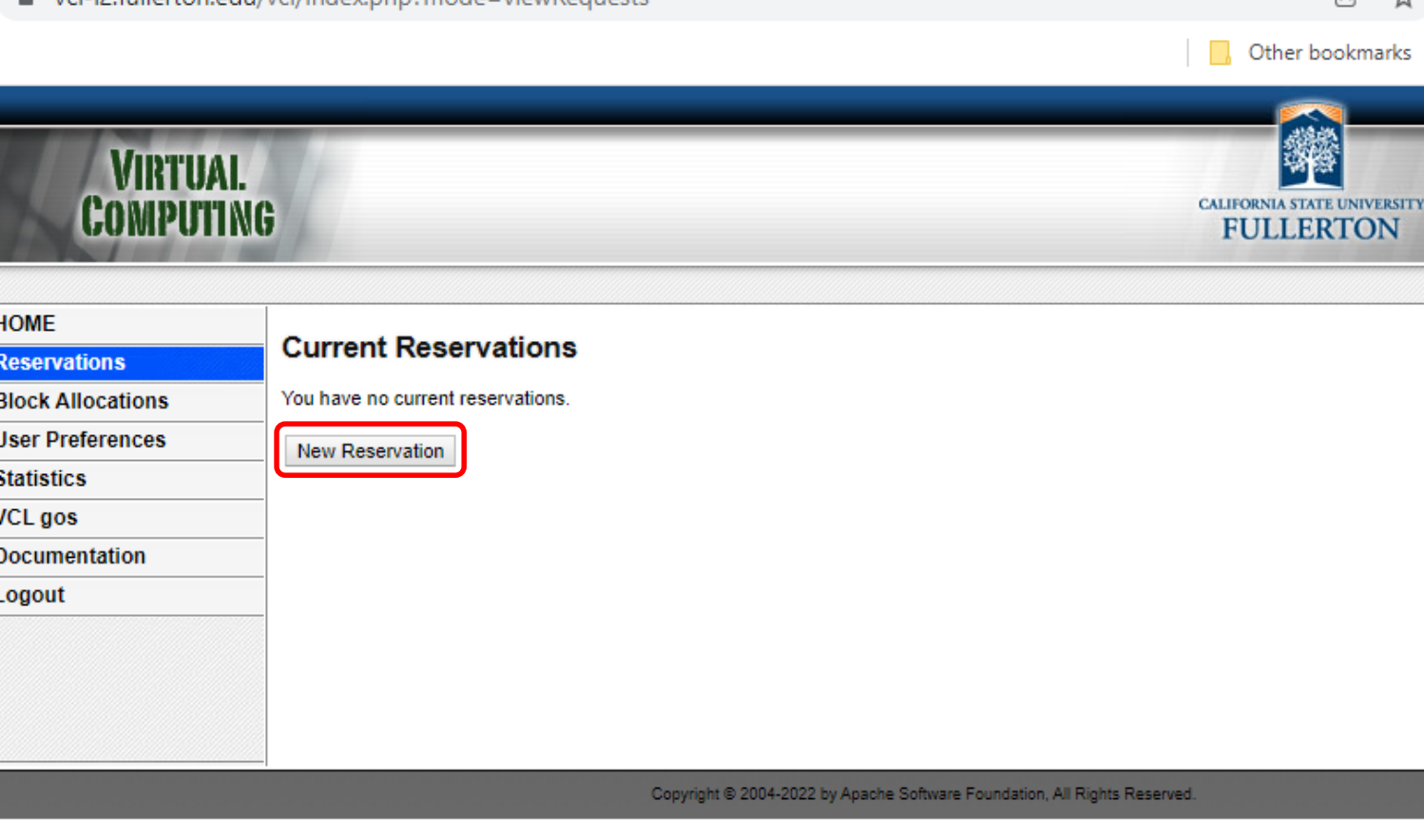
- CSUF Login - CSUF's Shibboleth Login
- UCI Login - UCI's Shibboleth Login
- Only use Local Account if there are no other options

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c. Select "Reservations" in the Virtual Computing Lab.

The screenshot shows a web browser window with two tabs: 'CSUF Portal' and 'VCL :: Virtual Computing Lab'. The address bar shows 'vcl-i2.fullerton.edu/vcl/'. The page features a header with the 'VIRTUAL COMPUTING' logo and the California State University Fullerton logo. A left sidebar menu contains the following items: HOME, Reservations (highlighted with a red box), Block Allocations, User Preferences, Statistics, VCL gos, Documentation, and Logout. The main content area displays a 'Welcome to the Virtual Computing Lab' message, followed by 'Hello Yitsen Ku' and a notice: 'You do not have any current reservations. Please make a selection from the menu to continue.' The footer contains the text: 'Copyright © 2004-2022 by Apache Software Foundation, All Rights Reserved.'



CSUF Portal x VCL :: Virtual Computing Lab x +

← → ↻ vcl-i2.fullerton.edu/vcl/index.php?mode=viewRequests

Apps | Other bookmarks | Reading list

HOME

Reservations

Block Allocations

User Preferences

Statistics

VCL gos

Documentation

Logout

Current Reservations

You have no current reservations.

[New Reservation](#)

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e. Select "ECS Ubuntu 20.04 Tuffix" and select "Duration=1/2/4 hours".
Click "Create Reservation" button.

The screenshot shows a web browser window with the URL `vcl-i2.fullerton.edu/vcl/index.php?mode=viewRequests`. The page displays the 'VIRTUAL COMPUTING' interface with a sidebar menu containing 'HOME', 'Reservations', 'Block Allocations', 'User Preferences', 'Statistics', 'VCL gos', 'Documentation', and 'Logout'. The 'Reservations' section is active. A 'New Reservation' dialog box is open, featuring a dropdown menu for selecting an environment, which is currently set to 'ECS Ubuntu 20.04 Tuffix'. Below this, the 'Image Description' is 'Tuffix'. The 'When would you like to use the environment?' section has 'Now' selected. The 'Duration' is set to '2 hours'. The 'Estimated load time' is '< 1 minute'. The 'Create Reservation' button is highlighted with a red box. The footer of the page reads 'Copyright © 2004-2022 by Apache Software Foundation, All Rights Reserved.'



f. Click "Connect!" to open "Connect" dialog.

The screenshot shows a web browser window with the URL `vcl-i2.fullerton.edu/vcl/index.php?mode=viewRequests`. The page features a sidebar with navigation links: HOME, Reservations (highlighted), Block Allocations, User Preferences, Statistics, VCL gos, Documentation, and Logout. The main content area is titled "Current Reservations" and includes a "New Reservation" button. Below this, a message states: "You currently have the following normal reservations:". A table follows with the following data:

	Environment	Starting	Ending	Initially requested
Connect! Delete Reservation More Options...	ECS Ubuntu 20.04 Tuffix	Sunday, Jan 30, 2022, 5:58 pm	Sunday, Jan 30, 2022, 8:00 pm	Sunday, Jan 30, 2022, 5:58 pm

Below the table, a note reads: "Click the Connect! button to get further information about connecting to the reserved system. You must click the button from a web browser running on the same computer from which you will be connecting to the remote computer; otherwise, you may be denied access to the machine."

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g. Click "Get RDP file" button.
Click the " ECS Ubuntu 20.04 Tuffix.rdp" file to log in.

The screenshot shows a web browser window with the URL `vcl-i2.fullerton.edu/vcl/index.php?mode=viewRequests`. The page displays a sidebar with navigation links: HOME, Reservations (highlighted), Block Allocations, User Preferences, Statistics, VCL gos, Documentation, and Logout. The main content area is titled "Connect" and contains instructions for connecting to a reservation using SSH for Linux & Unix and xRDP. The xRDP section lists the following information:

- Remote Computer: 137.151.225.93
- User ID: 899486336
- Password: xUagxvHm

The password "xUagxvHm" is highlighted with a red box. Below the list is a button labeled "Get RDP File", which is also highlighted with a red box. A "Close" button is located at the bottom right of the dialog box. The taskbar at the bottom shows a file named "ECS Ubuntu 20.04....rdp" highlighted with a red box. The "Show all" button is visible in the bottom right corner of the taskbar.



h. Click the "Connect" button to continue.

The screenshot shows a web browser window with the address bar displaying `vcl-i2.fullerton.edu/vcl/index.php?mode=viewRequests`. The page content includes a sidebar with links like HOME, Reservations, Block Allocations, User Preferences, Statistics, VCL gos, Documentation, and Logout. A modal dialog box titled "Remote Desktop Connection" is open, displaying a warning: "The publisher of this remote connection can't be identified. Do you want to connect anyway?" Below this, it states: "This remote connection could harm your local or remote computer. Do not connect unless you know where this connection came from or have used it before." The dialog also shows details: Publisher: Unknown publisher, Type: Remote Desktop Connection, and Remote computer: 137.151.225.93. There is a checkbox for "Don't ask me again for connections to this computer" and a "Show Details" link. The "Connect" button is highlighted with a red box, and the "Cancel" button is also visible. At the bottom of the dialog, there is a "Get RDP File" button and a "Close" button. The background page shows a "Initially requested" status for Sunday, Jan 30, 2022, 5:58 pm.



i. Click the "Yes" button to continue.

The screenshot shows a web browser window with the address bar displaying `vcl-i2.fullerton.edu/vcl/index.php?mode=viewRequests`. The page content includes a sidebar with links like HOME, Reservations, Block Allocations, User Preferences, Statistics, VCL gos, Documentation, and Logout. A modal dialog titled "Remote Desktop Connection" is overlaid on the page. The dialog contains a yellow warning banner with an exclamation mark icon and the text: "The identity of the remote computer cannot be verified. Do you want to connect anyway?". Below this, it states: "The remote computer could not be authenticated due to problems with its security certificate. It may be unsafe to proceed." The "Name mismatch" section shows: "Requested remote computer: 137.151.225.93" and "Name in the certificate from the remote computer: ubuntu". The "Certificate errors" section lists two errors: "The server name on the certificate is incorrect." and "The certificate is not from a trusted certifying authority." At the bottom, it asks "Do you want to connect despite these certificate errors?" with a checkbox for "Don't ask me again for connections to this computer". There are three buttons at the bottom: "View certificate...", "Yes" (highlighted with a red box), and "No".

CSUF Portal

VCL :: Virtual Computing Lab

vcl-i2.fullerton.edu/vcl/index.php?mode=viewRequests

Apps

Other bookmarks

Reading list

Remote Desktop Connection

The identity of the remote computer cannot be verified. Do you want to connect anyway?

The remote computer could not be authenticated due to problems with its security certificate. It may be unsafe to proceed.

Name mismatch

Requested remote computer:
137.151.225.93

Name in the certificate from the remote computer:
ubuntu

Certificate errors

The following errors were encountered while validating the remote computer's certificate:

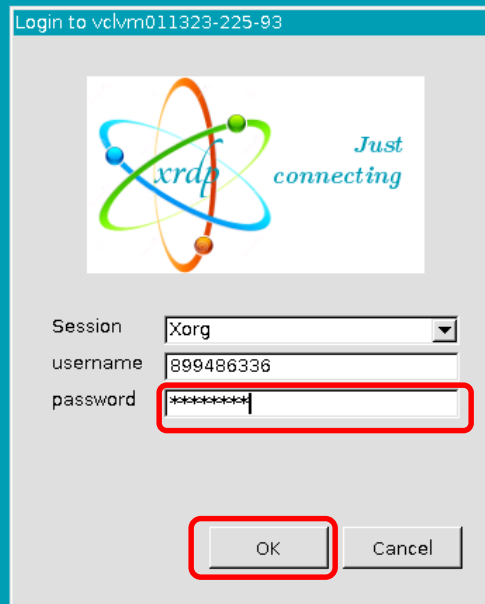
- The server name on the certificate is incorrect.
- The certificate is not from a trusted certifying authority.

Do you want to connect despite these certificate errors?


☐ Don't ask me again for connections to this computer

View certificate... Yes No

j. Input password and click the "OK" button to continue.



Login to vclvm011323-225-93

 Just connecting

Session

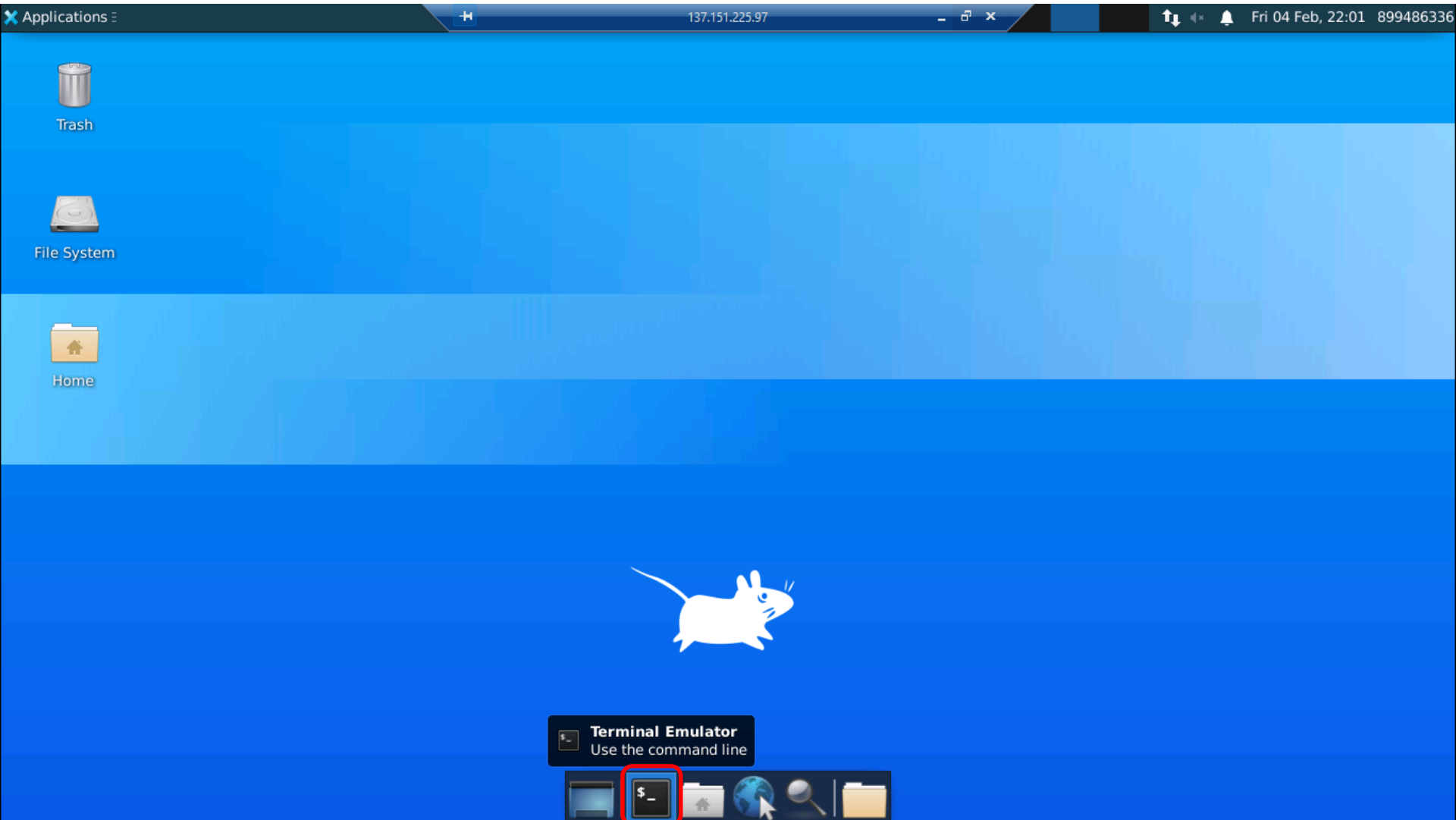
username

password

Upload Program



a. Click the "Terminal Emulator" to open the "Terminal Emulator" window.





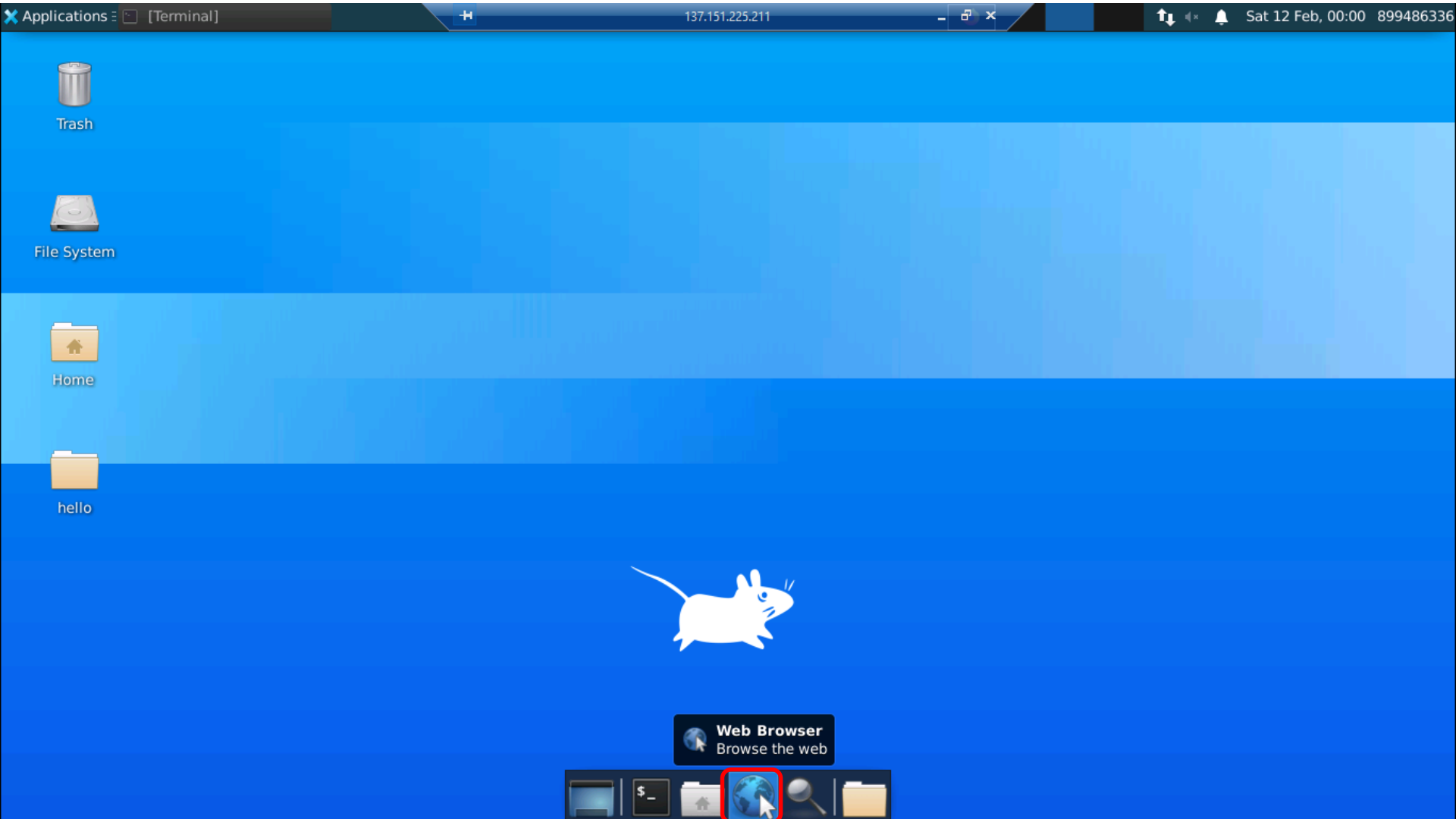
- b. Input "cd Desktop" to change directory to "Desktop".
Input "mkdir hello" to create a "hello" folder.**

A screenshot of a terminal window titled "Terminal". The window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal shows three lines of commands and their prompts: the first line is "[tuffix@vclvm011141-225-211 ~]\$ cd Desktop" with "cd Desktop" highlighted by a red box; the second line is "[tuffix@vclvm011141-225-211 Desktop]\$ mkdir hello" with "mkdir hello" highlighted by a red box; and the third line is "[tuffix@vclvm011141-225-211 Desktop]\$ " followed by a black cursor. The terminal has a scrollbar on the right side.

```
[tuffix@vclvm011141-225-211 ~]$ cd Desktop
[tuffix@vclvm011141-225-211 Desktop]$ mkdir hello
[tuffix@vclvm011141-225-211 Desktop]$
```



a. Switch to "Desktop" and click on "Web Browser" icon to open the "Web Browser".



b. Open "CSUF portal" and click on the "DropBox".

Applications | CSUF Portal - Mozilla Fir... [Terminal] 137.151.225.211 Sat 12 Feb, 00:01 899486336

CSUF Portal - Mozilla Firefox

CSUF Portal x +

https://my.fullerton.edu/Portal/Dashboard/

CSUF Portal

Yitsen (Joshua) /Faculty/Staff/Alu...

Apps filter

Apps Favorite History

DEFAULT APPS

Home

Canvas

DropBox for Employee

Health Portal / Vaccination

Tiles

Canvas

Titan Advisors Network Employee

Titan Online

Health Portal / Vaccination

DropBox for Employee

Interfolio

Canvas Student Engagement Faculty

LinkedIn Learning

Portal Message

YOU@fullerton is a tool designed to help students find articles, videos, and campus resources that will support their personal goals, overall wellness, and mental health. For more information click [here](#).

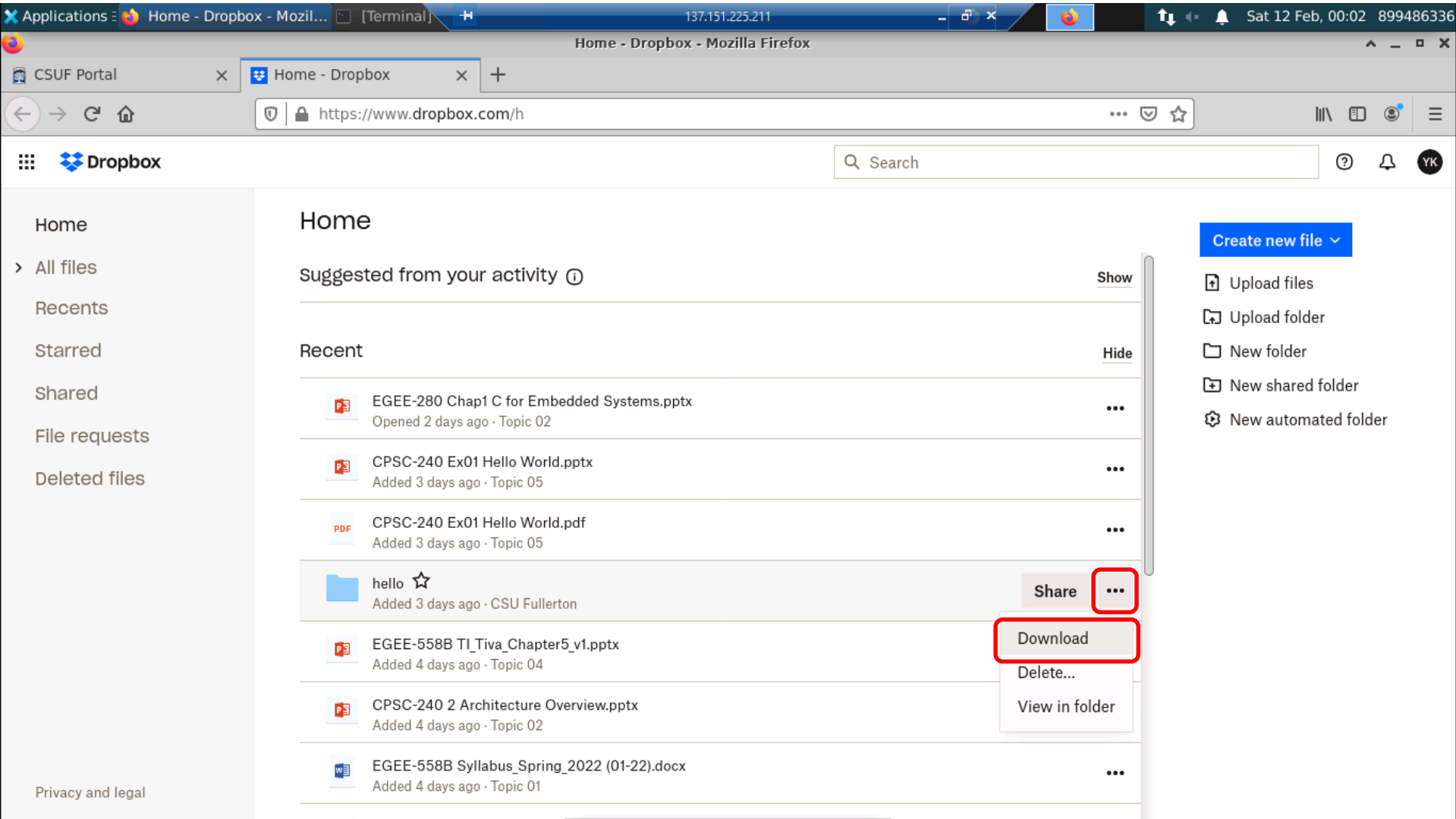
COVID-19 updates

For novel coronavirus (COVID-19) updates, please visit <http://coronavirus.fullerton.edu>.

[Keep Teaching: Strategies and Resources](#)

Titan Online Message

c. Click on "... " of the "hello" folder and select the "Download" item to download "hello" folder.



The screenshot shows a Mozilla Firefox browser window with the URL <https://www.dropbox.com/h>. The page displays the Dropbox 'Home' interface. On the left sidebar, the 'Home' link is selected. The main content area shows a list of files and folders under the heading 'Suggested from your activity'. The 'hello' folder is highlighted, and its context menu is open, showing the 'Download' option. The 'Download' option is highlighted with a red box. The 'Share' option is also visible, and the '...' menu icon is highlighted with a red box. The 'Delete...' and 'View in folder' options are also visible in the menu.

Applications | Home - Dropbox - Mozil... | [Terminal] | 137.151.225.211 | Home - Dropbox - Mozilla Firefox

CSUF Portal | Home - Dropbox | <https://www.dropbox.com/h>

Dropbox

Home

> All files

Recents

Starred

Shared

File requests

Deleted files

Home

Suggested from your activity ⓘ

Recent

EGEE-280 Chap1 C for Embedded Systems.pptx
Opened 2 days ago · Topic 02

CPSC-240 Ex01 Hello World.pptx
Added 3 days ago · Topic 05

CPSC-240 Ex01 Hello World.pdf
Added 3 days ago · Topic 05

hello ☆
Added 3 days ago · CSU Fullerton

EGEE-558B TI_Tiva_Chapter5_v1.pptx
Added 4 days ago · Topic 04

CPSC-240 2 Architecture Overview.pptx
Added 4 days ago · Topic 02

EGEE-558B Syllabus_Spring_2022 (01-22).docx
Added 4 days ago · Topic 01

Create new file ▾

Upload files

Upload folder

New folder

New shared folder

New automated folder

Share

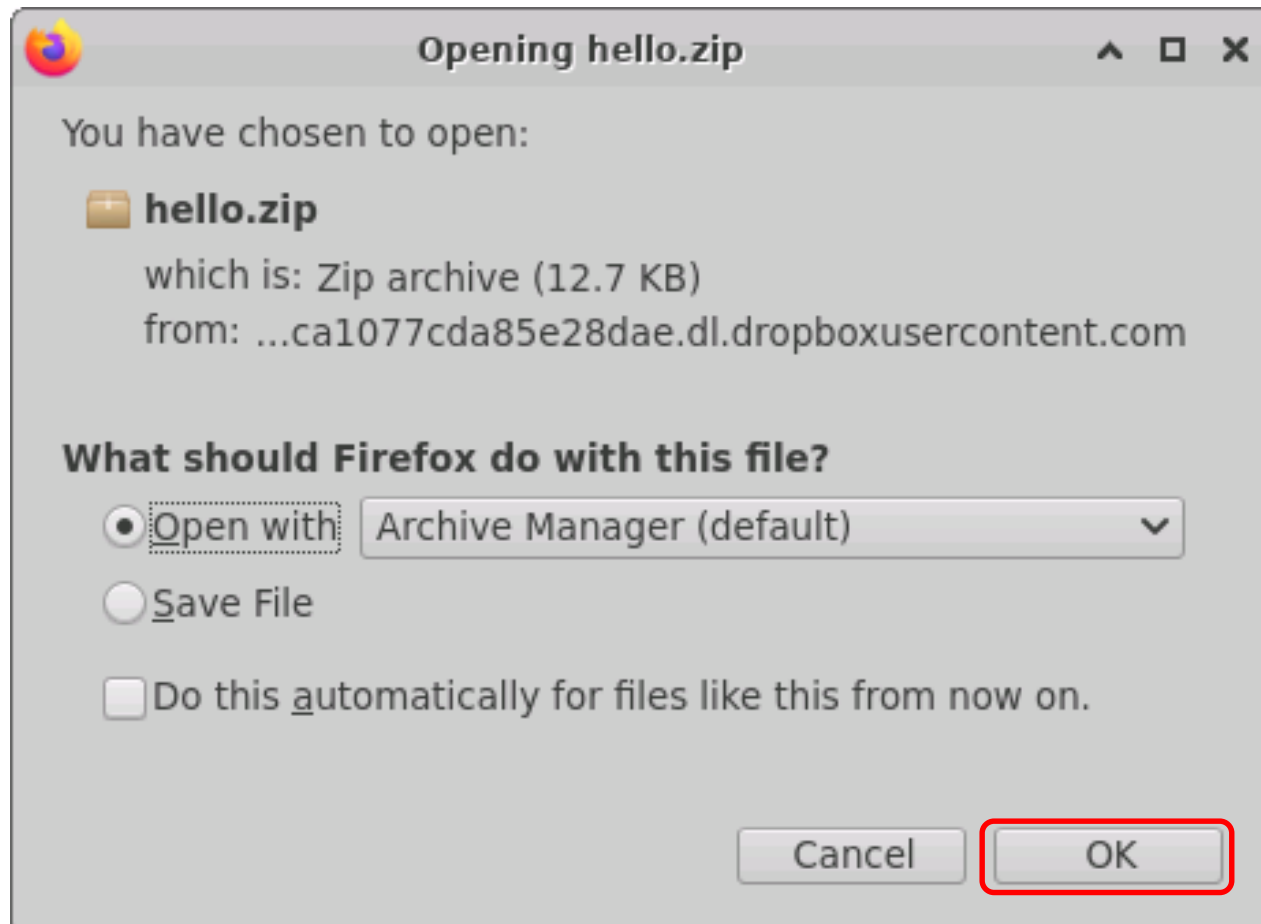
Download

Delete...

View in folder

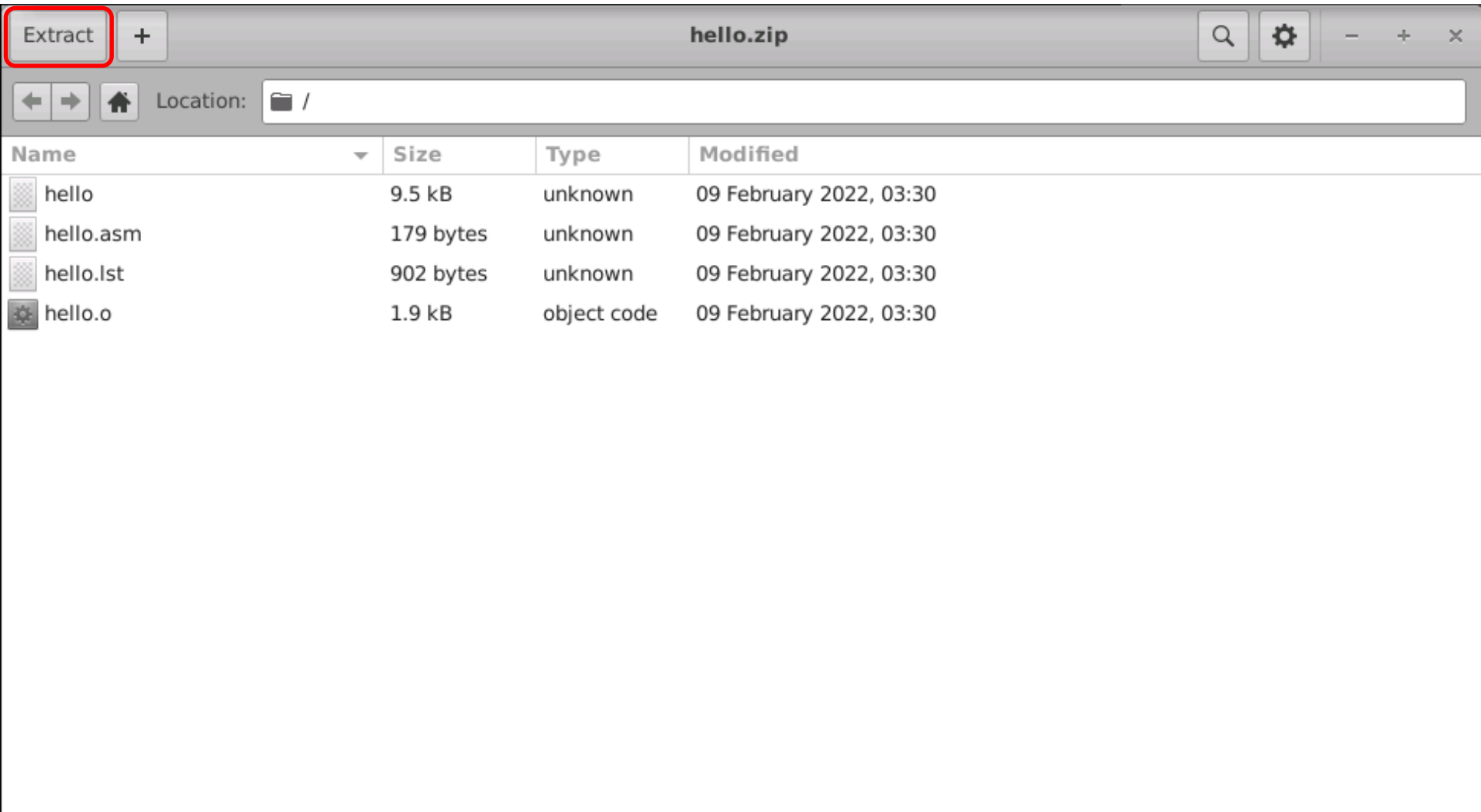
Privacy and legal

d. Click the "OK" button of the "Opening hello.zip" dialog to continue...

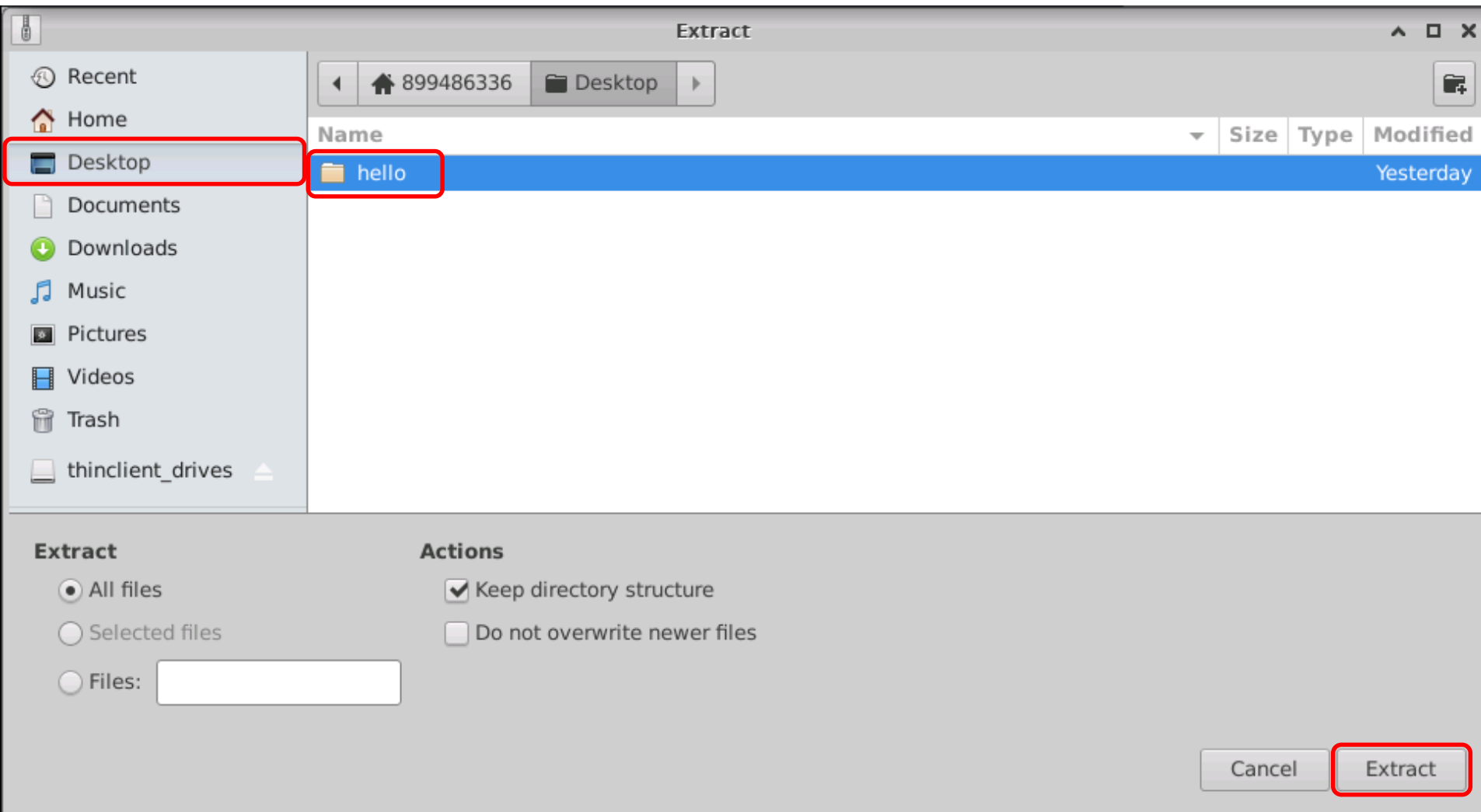




e. Click the "Extract" button to continue...

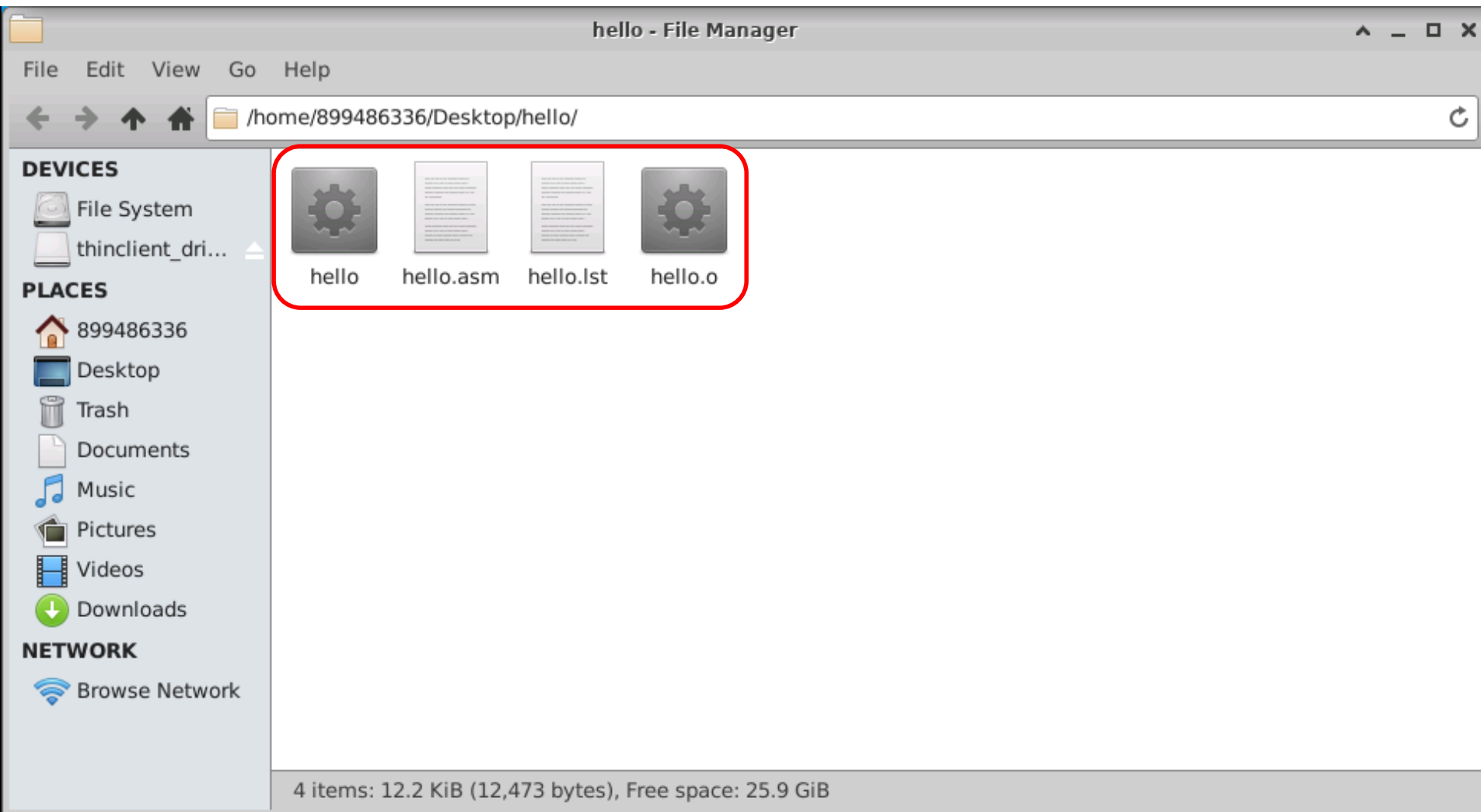


f. Select the "Desktop/hello" folder and click the "Extract" button to extract the zip file to the "hello" folder.





g. Switch to "Desktop" and open "hello" folder to check the files.



Create New Program



a. Switch to "Terminal" window. Input the "cd hello" to change directory to "hello". Input the "sudo apt-get install ddd" command to install "ddd" debugger.

A screenshot of a terminal window titled "Terminal". The window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal shows a series of commands and their outputs. The prompt is [tuffix@vclvm010925-226-215 ~]. The commands and outputs are: "cd Desktop" (output: Desktop), "mkdir hello" (output: Desktop), "cd hello" (output: hello), "ls" (output: hello, hello.asm, hello.lst, hello.o), and "sudo apt-get install ddd" (output: hello). The commands "cd hello" and "sudo apt-get install ddd" are highlighted with red boxes.

```
[tuffix@vclvm010925-226-215 ~]$ cd Desktop
[tuffix@vclvm010925-226-215 Desktop]$ mkdir hello
[tuffix@vclvm010925-226-215 Desktop]$ cd hello
[tuffix@vclvm010925-226-215 hello]$ ls
hello hello.asm hello.lst hello.o
[tuffix@vclvm010925-226-215 hello]$ sudo apt-get install ddd
```

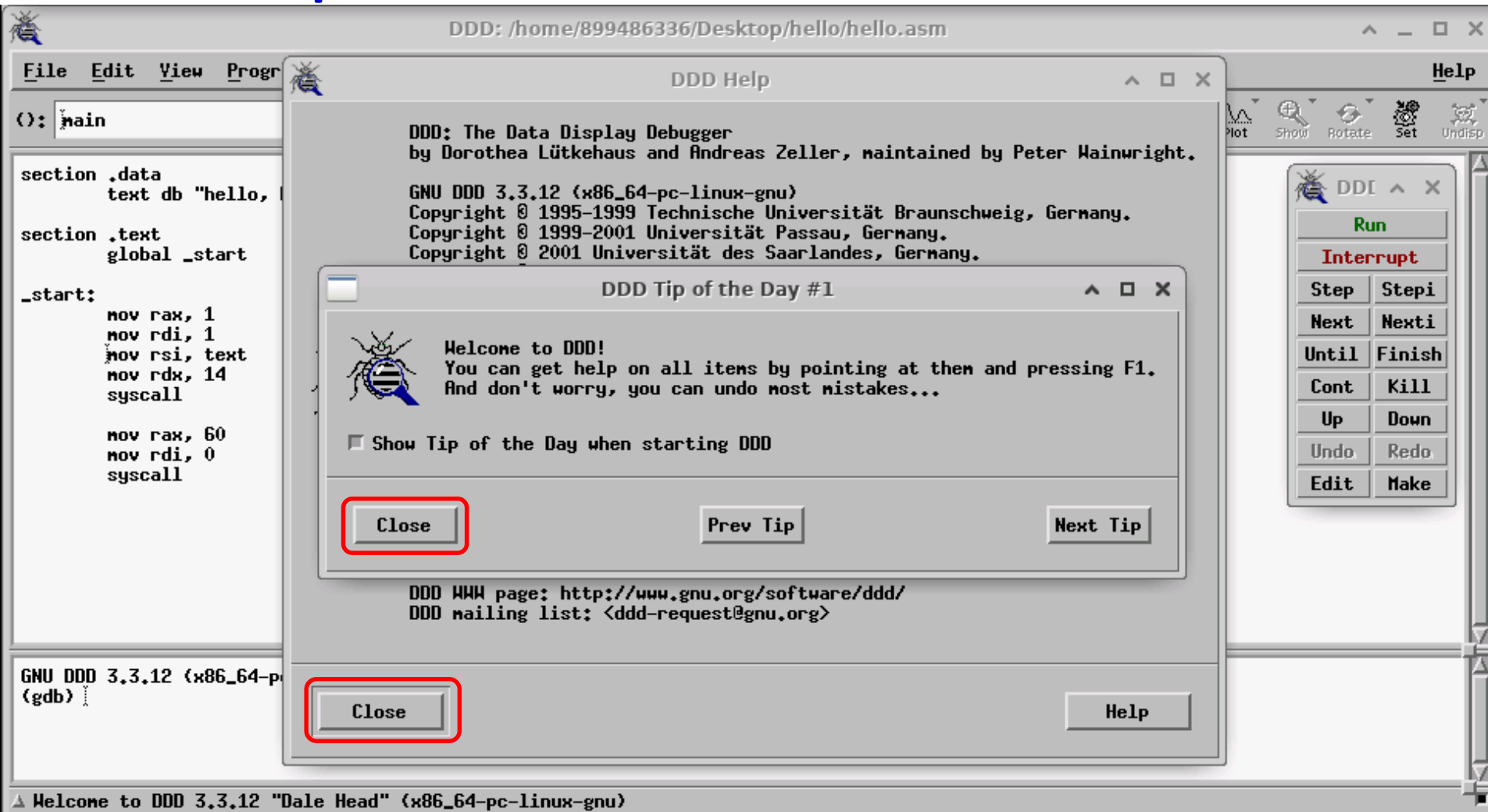



b. Input the "ddd hello" command after installing the "ddd" debugger.

```
Terminal
File Edit View Search Terminal Help
Do you want to continue? [Y/n] y
Get:1 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 libmotif-common all 2.3.8-2build1 [10.8 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 libxm4 amd64 2.3.8-2build1 [993 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 ddd amd64 1:3.3.12-5.2build1 [1,334 kB]
Fetched 2,337 kB in 2s (1,412 kB/s)
Selecting previously unselected package libmotif-common.
(Reading database ... 234948 files and directories currently installed.)
Preparing to unpack .../libmotif-common_2.3.8-2build1_all.deb ...
Unpacking libmotif-common (2.3.8-2build1) ...
Selecting previously unselected package libxm4:amd64.
Preparing to unpack .../libxm4_2.3.8-2build1_amd64.deb ...
Unpacking libxm4:amd64 (2.3.8-2build1) ...
Selecting previously unselected package ddd.
Preparing to unpack .../ddd_1%3a3.3.12-5.2build1_amd64.deb ...
Unpacking ddd (1:3.3.12-5.2build1) ...
Setting up libmotif-common (2.3.8-2build1) ...
Setting up libxm4:amd64 (2.3.8-2build1) ...
Setting up ddd (1:3.3.12-5.2build1) ...
Processing triggers for install-info (6.7.0.dfsg.2-5) ...
Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...
Processing triggers for mime-support (3.64ubuntu1) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...
Processing triggers for libc-bin (2.31-0ubuntu9) ...
Processing triggers for man-db (2.9.1-1) ...
[tuffix@vclvm010925-226-215 hello]$ ddd hello
```

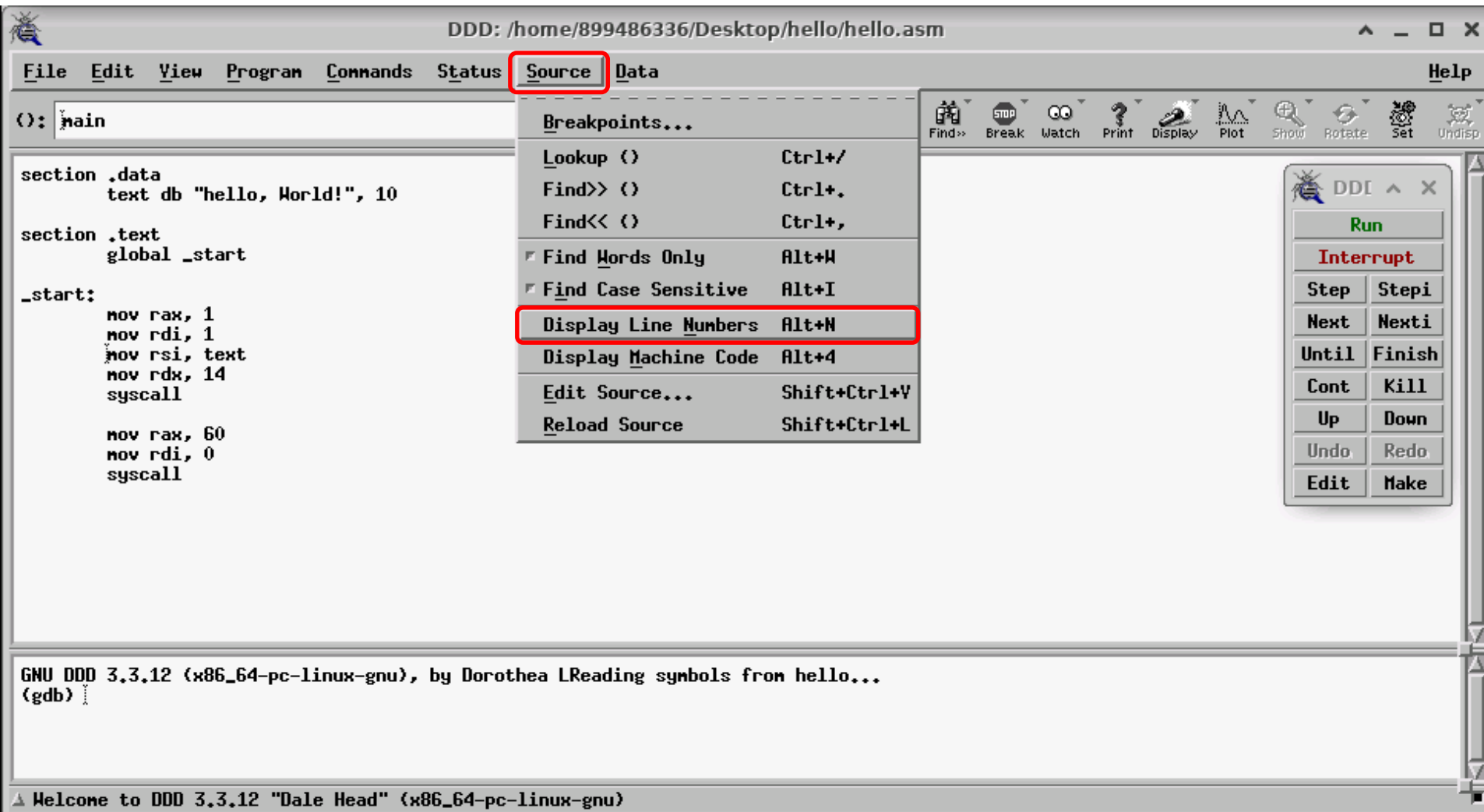


c. Click the "Close" button to close the "DDD Tip of the Day" window, and Click the "Close" button to close the "DDD Help" window.





d. Select "Source/Display Line Numbers" to display line numbers to the left of the instructions.





e. Input "break 12" command to set a breakpoint on line 12.

The screenshot shows the GNU Debugger (GDB) interface. The main window displays the assembly code for 'hello.asm'. The code is as follows:

```
1 section .data
2     text db "hello, World!", 10
3
4 section .text
5     global _start
6
7 _start:
8     mov rax, 1
9     mov rdi, 1
10    mov rsi, text
11    mov rdx, 14
12    syscall
13
14    mov rax, 60
15    mov rdi, 0
16    syscall
```

The command prompt at the bottom shows the command `break 12` being entered, which sets a breakpoint on line 12. The status bar at the bottom indicates "Enabling line numbers...done."

GNU GDB 3.3.12 (x86_64-pc-linux-gnu), by Dorothea LReading symbols from hello...
(gdb) `break 12`

Enabling line numbers...done.



f. Click the "Run" button to simulate to line 12, as shown in the "gdb" panel.

The screenshot shows the DDI debugger window with the title bar "DDI: /home/899486336/Desktop/hello/hello.asm". The menu bar includes File, Edit, View, Program, Commands, Status, Source, Data, and Help. The toolbar contains icons for Lookup, Find, Break, Watch, Print, Display, Plot, Show, Rotate, Set, and Undo. The main window displays assembly code for a program named "main". The code is as follows:

```
1 section .data
2     text db "hello, World!", 10
3
4 section .text
5     global _start
6
7 _start:
8     mov rax, 1
9     mov rdi, 1
10    mov rsi, text
11    mov rdx, 14
12    syscall
13
14    mov rax, 60
15    mov rdi, 0
16    syscall
```

A red arrow points to line 12, which is highlighted. A red box highlights the "Run" button in the DDI toolbar. The DDI toolbar also includes buttons for Interrupt, Step, Stepi, Next, Nexti, Until, Finish, Cont, Kill, Up, Down, Undo, Redo, Edit, and Make.

The bottom panel shows the GDB command prompt with the following text:

```
(gdb) run
Starting program: /home/899486336/Desktop/hello/hello
Breakpoint 1, _start () at hello.asm:12
(gdb) |
```

A red box highlights the text "Breakpoint 1, _start () at hello.asm:12". The status bar at the bottom indicates "Breakpoint 1 at 0x40101c: file hello.asm, line 12."



g. Select "Status/Registers..." item to open "DDD: Registers" window.

The screenshot shows the DDD (Data Display Debugger) window. The title bar reads "DDD: /home/899486336/Desktop/hello/hello.asm". The menu bar includes File, Edit, View, Program, Commands, Status, Source, Data, and Help. The "Status" menu is open, and the "Registers..." option is highlighted with a red rectangle. Other options in the menu include Backtrace..., Threads..., Signals..., Up (Ctrl+Up), and Down (Ctrl+Down). The main window displays assembly code for a program named "main". The code includes a data section with a string "hello, World!", a text section with a global "_start" label, and a series of instructions: "mov rax, 1", "mov rdi, 1", "mov rsi, text", "mov rdx, 14", "syscall", "mov rax, 60", "mov rdi, 0", and "syscall". A red "STOP" icon is visible next to line 12. On the right side, there is a "DDD" panel with buttons for Run, Interrupt, Step, StepI, Next, NextI, Until, Finish, Cont, Kill, Up, Down, Undo, Redo, Edit, and Make. The bottom status bar shows the command "(gdb) run" and the output "Starting program: /home/899486336/Desktop/hello/hello". Below that, it says "Breakpoint 1, _start () at hello.asm:12" and "(gdb) [". The very bottom status bar indicates "Breakpoint 1 at 0x40101c: file hello.asm, line 12."



h. The "DDD: Registers" window shows `rax=1`, `rdi=1`, `rsi=0x402000`, and `rdx=14`. Agree with the instructions on lines 8 to 11.

The screenshot shows the DDD (Data Display Debugger) interface. The main window displays assembly code for a program named `hello.asm`. The code includes a data section with a string "hello, World!", a text section, and a `_start` function. The `_start` function contains instructions to move values into registers `rax`, `rdi`, `rsi`, and `rdx`, followed by a `syscall` instruction. A breakpoint is set at line 12, which is the `syscall` instruction. The `DDD: Registers` window is open, showing the current state of the registers. The registers `rax`, `rdi`, `rsi`, and `rdx` are highlighted with a red box, showing values `0x1`, `0x1`, `0x402000`, and `0xe` (14) respectively. The `DDD: DDI` window is also open, showing a `Run` button and various control buttons. The bottom status bar indicates the breakpoint location: `Breakpoint 1 at 0x40101c: file hello.asm, line 12.`

DDD: /home/899486336/Desktop/hello/hello.asm

File Edit View Program Commands Status Source Data Help

(`:`): main

```
1 section .data
2     text db "hello, World!", 10
3
4 section .text
5     global _start
6
7 _start:
8     mov rax, 1
9     mov rdi, 1
10    mov rsi, text
11    mov rdx, 14
12    syscall
13
14    mov rax, 60
15    mov rdi, 0
16    syscall
```

DDD: Registers

Registers		
rax	0x1	1
rbx	0x0	0
rcx	0x0	0
rdx	0xe	14
rsi	0x402000	4202496
rdi	0x1	1
rbp	0x0	0x0
rsp	0x7fffffffef0	0x7fffffffef0
r8	0x0	0
r9	0x0	0
r10	0x0	0
r11	0x0	0
r12	0x0	0

Integer registers All registers

Close Help

DDD: DDI

Run

Interrupt

Step StepI

Next NextI

Until Finish

Cont Kill

Up Down

Undo Redo

Edit Make

(gdb) run
Starting program: /home/899486336/Desktop/hello/hello.asm
Breakpoint 1, _start () at hello.asm:12
(gdb) [

Breakpoint 1 at 0x40101c: file hello.asm, line 12.



- i. Click the "Next" button once and the "gdb" panel displays the "hello, World!" string. Continue to click the "Next" button twice, then `rax=60` and `rdi=0`, as shown in the "DDD: Registers" window.

The screenshot shows the DDD (Data Display Debugger) interface. The main window displays assembly code for a program named `hello.asm`. The code is as follows:

```
1 section .data
2     text db "hello, World!", 10
3
4 section .text
5     global _start
6
7 _start:
8     mov rax, 1
9     mov rdi, 1
10    mov rsi, text
11    mov rdx, 14
12    syscall
13
14    mov rax, 60
15    mov rdi, 0
16    syscall
```

The GDB console at the bottom shows the following commands and output:

```
(gdb) next
hello, World!
(gdb) next
(gdb) next
(gdb) |
```

The "DDD: Registers" window is open, displaying the state of the registers. The registers are listed in a table:

Register	Value (Hex)	Value (Dec)
rax	0x3c	60
rbx	0x0	0
rcx	0x401004	4198404
rdx	0xe	14
rsi	0x402000	4202496
rdi	0x0	0
rbp	0x0	0x0
rsp	0x7fffffffef0	0x7fffffffef0
r8	0x0	0
r9	0x0	0
r10	0x0	0
r11	0x302	770
r12	0x0	0

The "DDD: Registers" window also includes a "Close" button and a "Help" button. The "DDD: DDI" window on the right shows a "Run" button and an "Interrupt" button, along with a set of navigation buttons: "Step", "Stepi", "Next", "Nexti", "Until", "Finish", "Cont", "Kill", "Up", "Down", "Undo", "Redo", "Edit", and "Make".



j. Input "x/14db &text" command in the "gdb" panel to display the ASCII code of the string "text".

The screenshot shows the DDD (Data Display Debugger) interface. The main window displays assembly code for a program named 'hello.asm'. The code includes a data section with a string 'hello, World!', a text section, and a main function. The GDB command window at the bottom shows the command 'x/14db &text' being executed, which displays the ASCII code of the string 'hello, World!' in memory. The output is highlighted with a red box.

```
1 section .data
2     text db "hello, World!", 10
3
4 section .text
5     global _start
6
7 _start:
8     mov rax, 1
9     mov rdi, 1
10    mov rsi, text
11    mov rdx, 14
12    syscall
13
14    mov rax, 60
15    mov rdi, 0
16    syscall
```

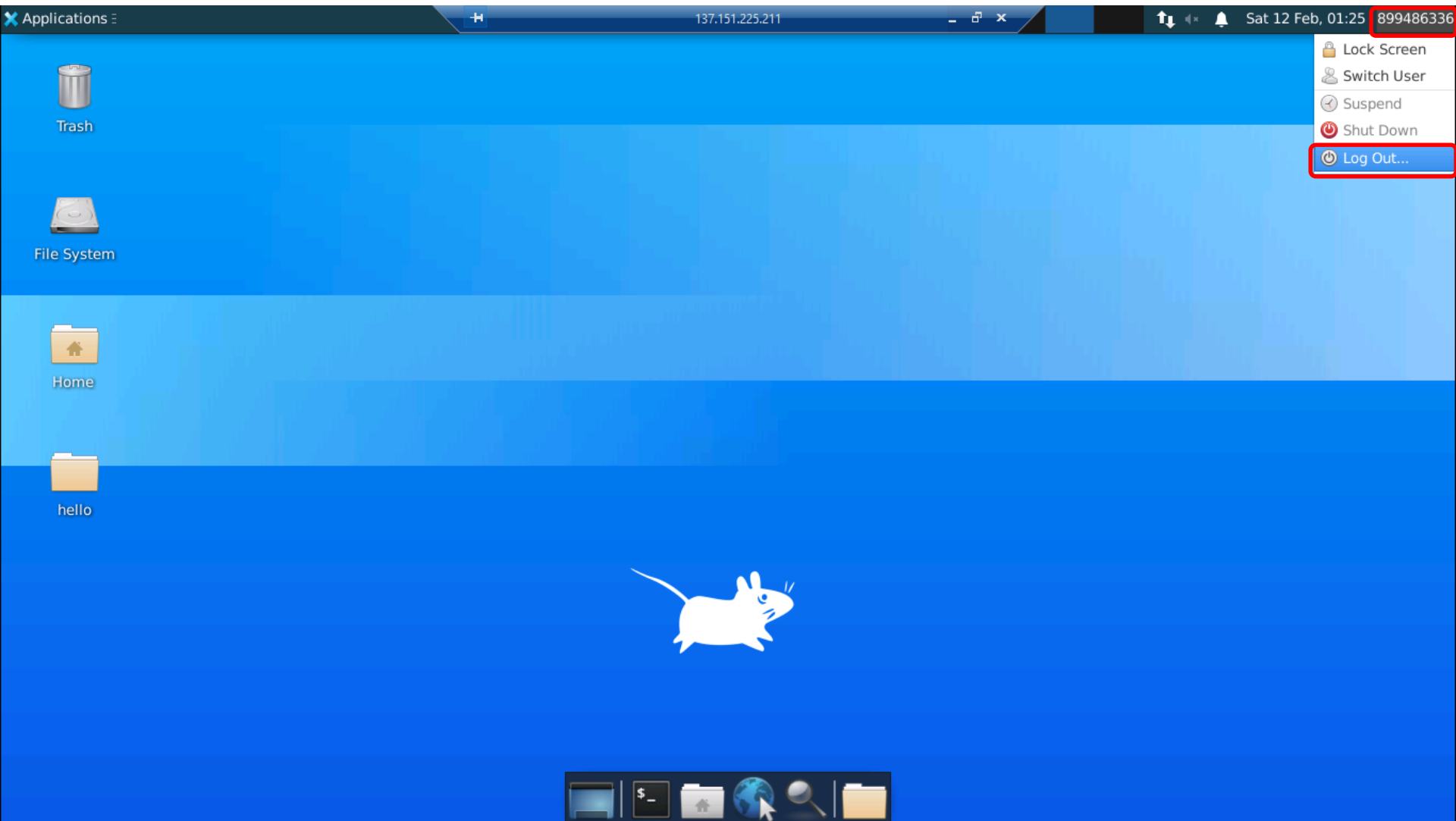
(gdb) next
(gdb) x/14db &text
0x402000: 104 101 108 108 111 44 32 87
0x402008: 111 114 108 100 33 10

(gdb) l

0x402000: 104 101 108 108 111 44 32 87 0x402008: 111 114 108 100 33 10



k. Close all windows and select "CWID/Log Out..." to terminate the "Remote Desktop".



Thanks