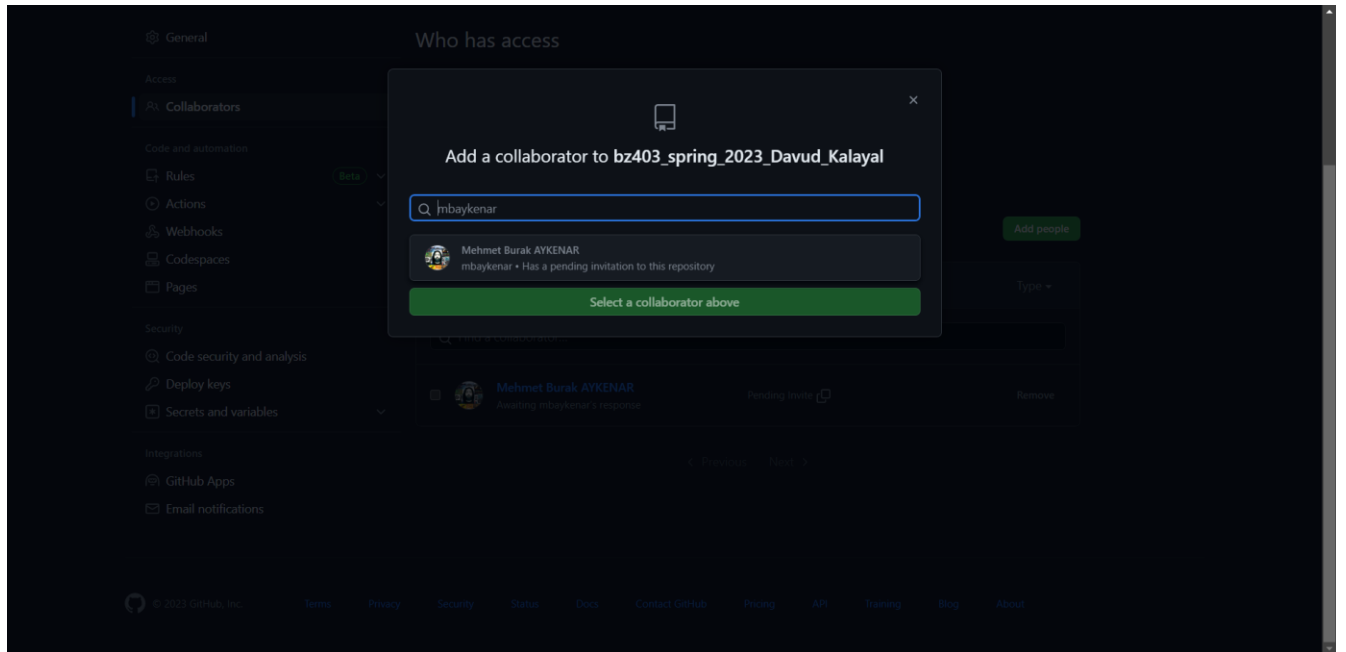
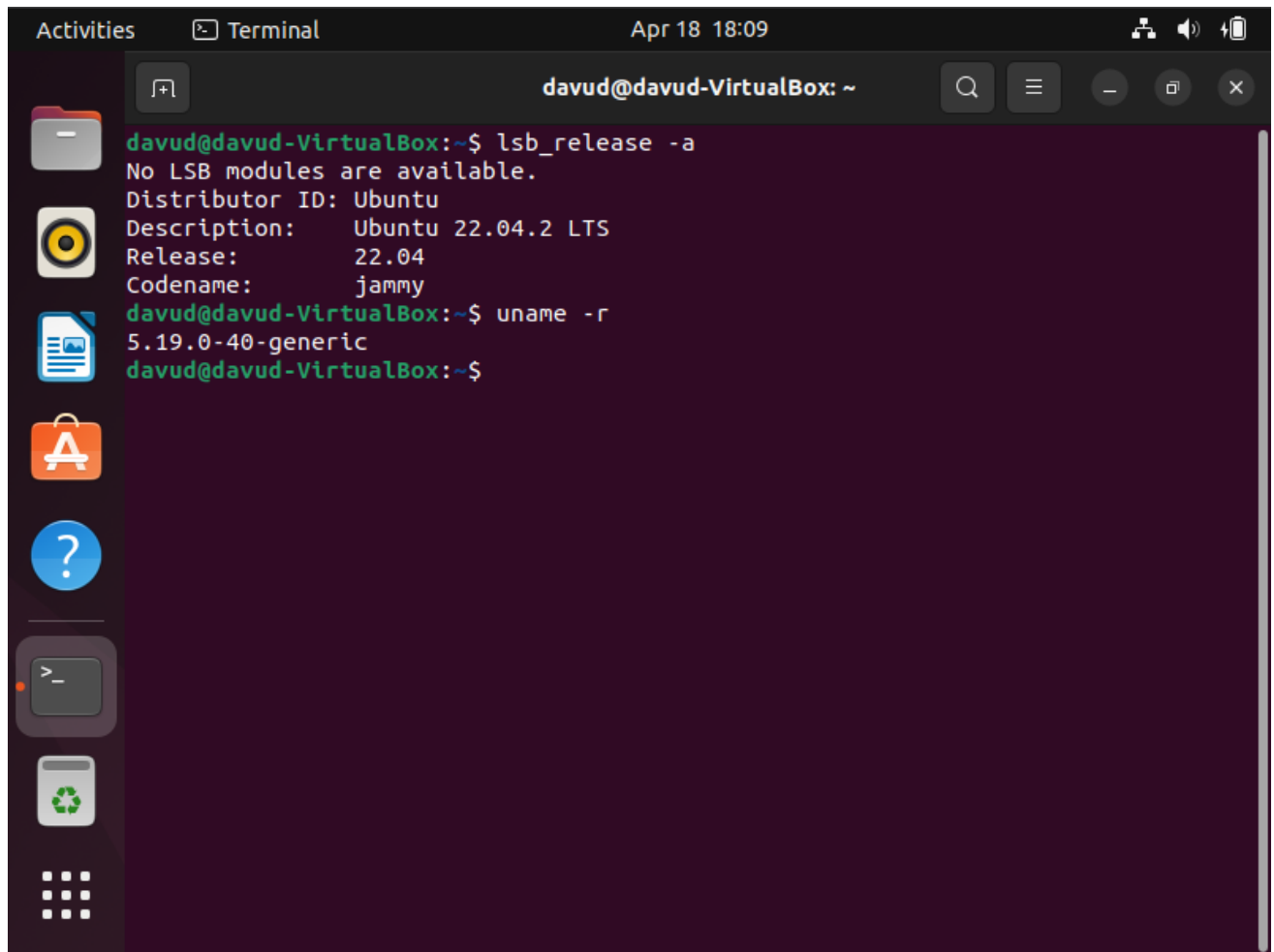


Davud Kalayal bz403 HW1

1.Soru:



2.Soru:

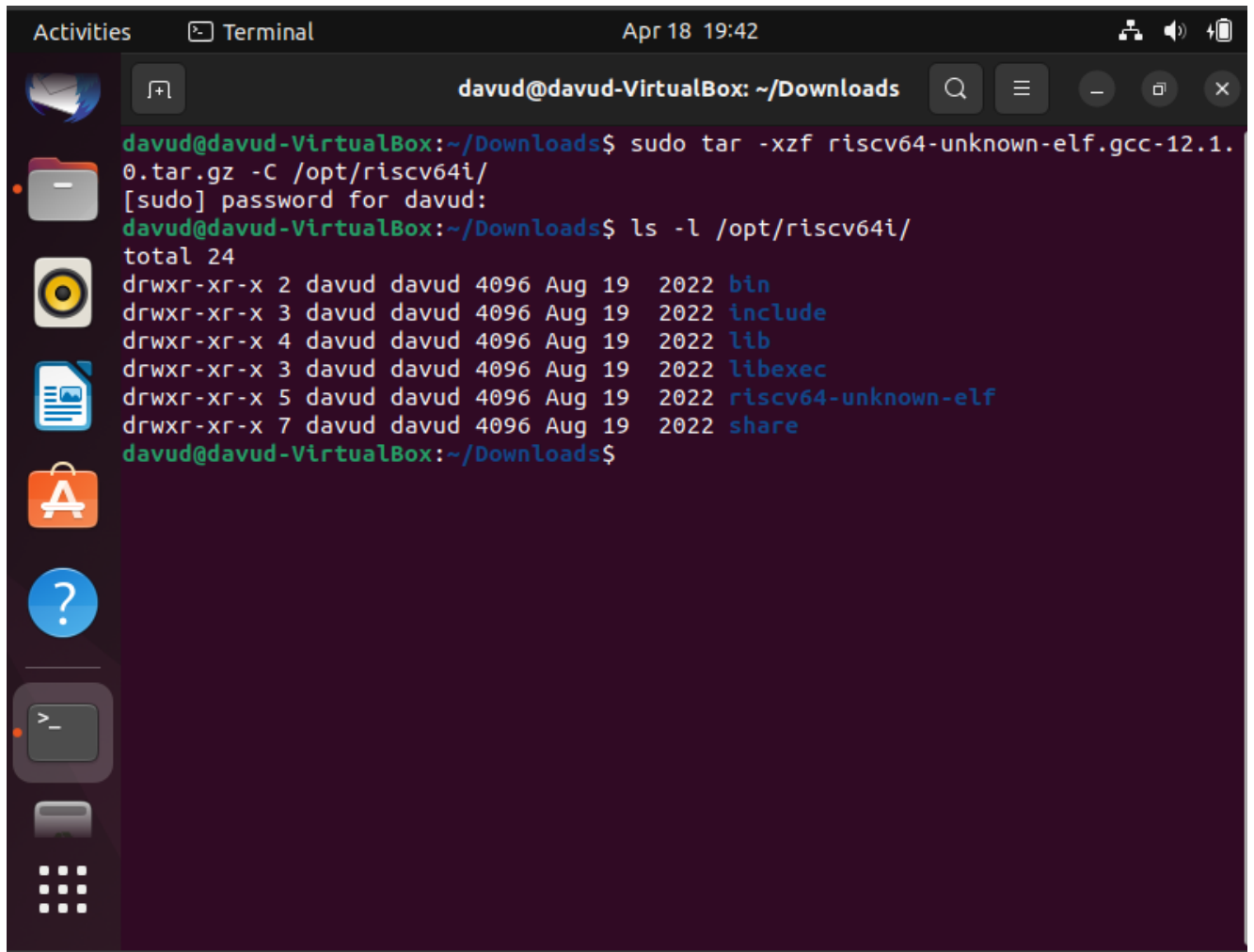


The image shows a terminal window titled "davud@davud-VirtualBox: ~" with a search icon, a menu icon, and window control buttons. The terminal output is as follows:

```
davud@davud-VirtualBox:~$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 22.04.2 LTS
Release:        22.04
Codename:       jammy
davud@davud-VirtualBox:~$ uname -r
5.19.0-40-generic
davud@davud-VirtualBox:~$
```

The terminal window is part of a desktop environment with a sidebar on the left containing icons for a file manager, a media player, a document, an application store, a help icon, a terminal, a trash, and a grid of application icons. The top of the window shows "Activities", "Terminal", and the date/time "Apr 18 18:09".

3.Soru:

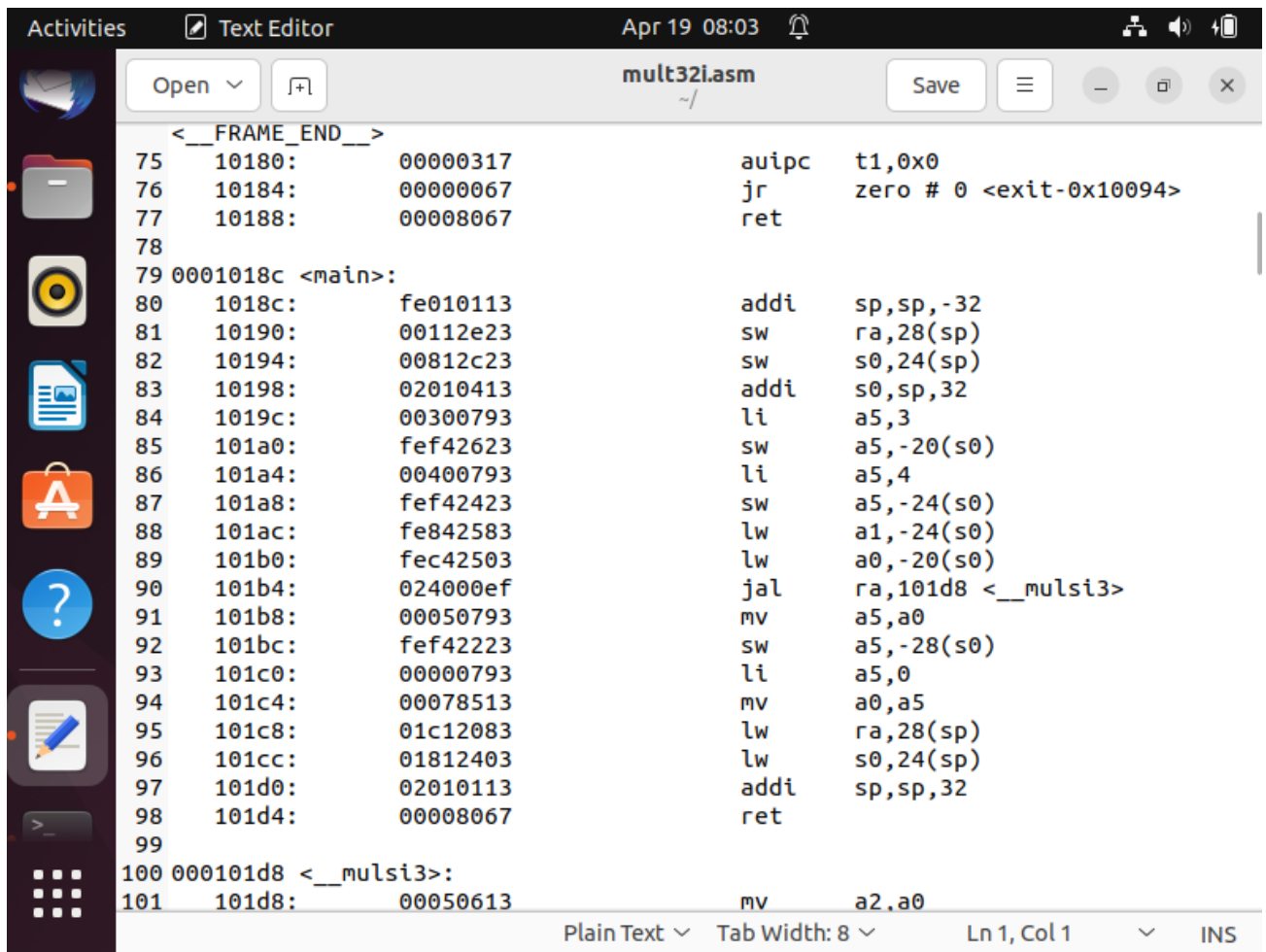


The image shows a terminal window titled "davud@davud-VirtualBox: ~/Downloads" with a search bar and window controls. The terminal output shows the user running a command to extract a tar file into the directory /opt/riscv64i/. After a password prompt, the user runs 'ls -l /opt/riscv64i/' to list the contents. The output shows a directory listing with permissions, owner, group, size, date, and file names.

```
davud@davud-VirtualBox:~/Downloads$ sudo tar -xzf riscv64-unknown-elf.gcc-12.1.0.tar.gz -C /opt/riscv64i/
[sudo] password for davud:
davud@davud-VirtualBox:~/Downloads$ ls -l /opt/riscv64i/
total 24
drwxr-xr-x 2 davud davud 4096 Aug 19 2022 bin
drwxr-xr-x 3 davud davud 4096 Aug 19 2022 include
drwxr-xr-x 4 davud davud 4096 Aug 19 2022 lib
drwxr-xr-x 3 davud davud 4096 Aug 19 2022 libexec
drwxr-xr-x 5 davud davud 4096 Aug 19 2022 riscv64-unknown-elf
drwxr-xr-x 7 davud davud 4096 Aug 19 2022 share
davud@davud-VirtualBox:~/Downloads$
```

4.Soru:

Mult32i:



The screenshot shows a Linux desktop with a dark theme. A text editor window titled 'mult32i.asm' is open, displaying assembly code. The code is organized into sections: a prologue, a 'main' function, and a '__mulsi3' function. The assembly instructions include memory management (pushing and popping the stack), arithmetic (adding and subtracting), and control flow (jumping and returning). The code is written in a standard assembly syntax with labels, addresses, hex values, and instructions.

```
<__FRAME_END__>
75 10180: 00000317      auipc    t1,0x0
76 10184: 00000067      jr      zero # 0 <exit-0x10094>
77 10188: 00008067      ret
78
79 0001018c <main>:
80 1018c: fe010113      addi     sp,sp,-32
81 10190: 00112e23      sw      ra,28(sp)
82 10194: 00812c23      sw      s0,24(sp)
83 10198: 02010413      addi     s0,sp,32
84 1019c: 00300793      li      a5,3
85 101a0: fef42623      sw      a5,-20(s0)
86 101a4: 00400793      li      a5,4
87 101a8: fef42423      sw      a5,-24(s0)
88 101ac: fe842583      lw      a1,-24(s0)
89 101b0: fec42503      lw      a0,-20(s0)
90 101b4: 024000ef      jal     ra,101d8 <__mulsi3>
91 101b8: 00050793      mv      a5,a0
92 101bc: fef42223      sw      a5,-28(s0)
93 101c0: 00000793      li      a5,0
94 101c4: 00078513      mv      a0,a5
95 101c8: 01c12083      lw      ra,28(sp)
96 101cc: 01812403      lw      s0,24(sp)
97 101d0: 02010113      addi     sp,sp,32
98 101d4: 00008067      ret
99
100 000101d8 <__mulsi3>:
101 101d8: 00050613      mv      a2,a0
```

Plain Text ▾ Tab Width: 8 ▾ Ln 1, Col 1 ▾ INS

Mult32imc:

Activities Text Editor Apr 19 08:04

mult32imc.asm

Open Save

```
75 10132: 00000317 auipc t1,0x0
76 10136: 00000067 jr zero # 0 <exit-0x10094>
77 1013a: 8082 ret
78
79 0001013c <main>:
80 1013c: 1101 addi sp,sp,-32
81 1013e: ce22 sw s0,28(sp)
82 10140: 1000 addi s0,sp,32
83 10142: 478d li a5,3
84 10144: fef42623 sw a5,-20(s0)
85 10148: 4791 li a5,4
86 1014a: fef42423 sw a5,-24(s0)
87 1014e: fec42703 lw a4,-20(s0)
88 10152: fe842783 lw a5,-24(s0)
89 10156: 02f707b3 mul a5,a4,a5
90 1015a: fef42223 sw a5,-28(s0)
91 1015e: 4781 li a5,0
92 10160: 853e mv a0,a5
93 10162: 4472 lw s0,28(sp)
94 10164: 6105 addi sp,sp,32
95 10166: 8082 ret
96
97 00010168 <__libc_init_array>:
98 10168: 1141 addi sp,sp,-16
99 1016a: c422 sw s0,8(sp)
100 1016c: 67c5 lui a5,0x11
101 1016e: 6445 lui s0,0x11
102 10170: c04a sw s2,0(sp)
```

Plain Text Tab Width: 8 Ln 1, Col 1 INS

Mult32i de JAL fonksiyonuvar imc de yok

Mult32i de a registerı kullanılmış imc de kullanılmamış

Mult32imc de mul fonksiyonu kullanılmıştır 32i de yoktur