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 - Semester: **Spring 2019**

Midterm Spring 2021

Question 1

Upgrading the systems will eventually go to help in the longer run. Installing Ubuntu is not going to help much, as 2GB ram and 50GB HDD are not sufficient for today's needs. Even simply browsing takes quite a lot of RAM whether one is using Chrome or Firefox. The latest Ubuntu is not lighter on the system than windows 7, comparisons can be seen on YouTube or other websites. On the HDD side, a fresh windows 7 takes 10-12 GB while Ubuntu takes approx 4 GB, so Ubuntu wins here. But, we need to see that 50GB will eventually go to get filled up really quickly.

ON the CPU side, the i3 4th generation is enough for the tasks listed. So, only the RAM and HDD need to be upgraded. Installing a low-capacity SSD like 128 GB for OS will make a significant impact, and for storage, a 320GB+ HDD is enough. RAM, on the other hand, should be a minimum of 6GB or 8GB be fine and able to take advantage of 64bit OS.

So, as discussed in the above two paragraphs, in the longer run, upgrading the system will help. On the other hand, installing Ubuntu is not going to help boost performance. In conclusion, upgrade the system with more RAM and HDD (SSD will be a plus for boot drive).

Question 2

Question 3

```

nouran@nouran-VirtualBox:~/midtermS21/question2]
└─$ wget https://robertalberto.com/cis106/midtermfiles/question2.tar
--2021-04-28 16:38:32 (434 KB/s) - 'question2.tar' saved [20480/20480]
Resolving robertalberto.com (robertalberto.com)... 34.66.0.162
Connecting to robertalberto.com (robertalberto.com)|34.66.0.162|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 20480 (20K) [application/x-tar]
Saving to: 'question2.tar'

question2.tar                                         100%[=====]  20.00K --.-KB/s   in 0.05s
2021-04-28 16:38:32 (434 KB/s) - 'question2.tar' saved [20480/20480]
└─$ ls
└─$ 

[nouran@nouran-VirtualBox:~/midtermS21/question3]
└─$ cd question3/
[nouran@nouran-VirtualBox:~/midtermS21/question3]
└─$ mkdir carCompany
[nouran@nouran-VirtualBox:~/midtermS21/question3]
└─$ cd carCompany
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ ls
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ mkdir {sql,html,js,css}
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ ls
ss html js sql
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ touch sql/{script1.sql,script2.sql}
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ ls sql/
script1.sql script2.sql
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ touch html/{home.html,contac.html,products.html}
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ ls html/
contac.html home.html products.html
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ touch css/{base.css,reset.css}
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ touch js/{slide.js,loader.js,script.js}
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
└─$ ls js/
loader.js script.js slide.js
[nouran@nouran-VirtualBox:~/midtermS21/question3/carCompany]
[nouran@nouran-VirtualBox:~/midtermS21/questions3]
└─$ ls -Rsh carCompany/
carCompany:
total 16K
.0K sql 4.0K js 4.0K html 4.0K css
carCompany/sql:
total 0
script2.sql 0 script1.sql
carCompany/js:
total 0
slide.js 0 script.js 0 loader.js
carCompany/html:
total 0
products.html 0 home.html 0 contac.html
carCompany/css:
total 0
reset.css 0 base.css
└─$ tar -cf carCompany.tar carCompany
[nouran@nouran-VirtualBox:~/midtermS21/question3]
└─$ ls
carCompany.tar
[nouran@nouran-VirtualBox:~/midtermS21/question3]
└─$ 

[nouran@nouran-VirtualBox:~/midtermS21/question3]
└─$ mv carCompany.tar ~/Documents/
[nouran@nouran-VirtualBox:~/midtermS21/question3]
└─$ 

```

Question 4

```

Applications Places
tar -xf question2tar - Parrot Terminal
nouran@nouran-VirtualBox:~/midtermS21/question2]
└─$ wget https://robertalberto.com/cis106/midtermfiles/question2.tar
--2021-04-28 16:38:31- https://robertalberto.com/cis106/midtermfiles/question2.tar
Resolving robertalberto.com (robertalberto.com)... 34.66.0.162
Connecting to robertalberto.com (robertalberto.com)|34.66.0.162|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 20480 (20K) [application/x-tar]
Saving to: 'question2.tar'

question2.tar                                         100%[=====]  20.00K --.-KB/s   in 0.05s
2021-04-28 16:38:32 (434 KB/s) - 'question2.tar' saved [20480/20480]
└─$ ls
└─$ question2.tar
└─$ rm question2.tar
[nouran@nouran-VirtualBox:~/midtermS21/question4]
└─$ cd question4/
[nouran@nouran-VirtualBox:~/midtermS21/question4]
└─$ 

```

```

[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ pwd
/home/nouran/midtermS21/question2
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ ls
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/bu101_all_assignments.txt ~/midtermS21/question2/fall-2021/bu101/assignments/bu101_all_assignments.txt
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ ls
all-2021 question2 question2.tar
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ ls question2/
bu101book.pdf bu108syllabus.docx cis108book.pdf cis108syllabus.docx cis125book.pdf cis125syllabus.docx en102book.pdf en102syllabus.docx
bu101notes.md cis108_all_assignments.txt cis108notes.md cis125_all_assignments.txt cis125notes.md en102_all_assignments.txt en102notes.md
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/bu101book.pdf ~/midtermS21/question2/fall-2021/bu101/book/bu101book.pdf
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ ls question2/
bu101notes.md cis108_all_assignments.txt cis108notes.md cis125_all_assignments.txt cis125notes.md en102_all_assignments.txt en102notes.md
bu108syllabus.docx cis108book.pdf cis108syllabus.docx cis125book.pdf cis125syllabus.docx en102book.pdf en102syllabus.docx
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/bu101notes.md ~/midtermS21/question2/fall-2021/bu101/notes/bu101notes.md
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ ls question2/
bu108syllabus.docx cis108book.pdf cis108syllabus.docx cis125book.pdf cis125syllabus.docx en102book.pdf en102syllabus.docx
cis108_all_assignments.txt cis108notes.md cis125_all_assignments.txt cis125notes.md en102_all_assignments.txt en102notes.md
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/bu108syllabus.docx ~/midtermS21/question2/fall-2021/bu101/syllabus/bu108syllabus.docx
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/cis108_all_assignments.txt ~/midtermS21/question2/fall-2021/cis108/assignments/cis108_all_assignments.txt
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/cis108book.pdf ~/midtermS21/question2/fall-2021/cis108/book/cis108book.pdf
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/cis108notes.md ~/midtermS21/question2/fall-2021/cis108/notes/cis108notes.md
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/cis108syllabus.docx ~/midtermS21/question2/fall-2021/cis108/syllabus/cis108syllabus.docx
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/cis125_all_assignments.txt ~/midtermS21/question2/fall-2021/cis125/assignments/cis125_all_assignments.txt
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/cis125book.pdf ~/midtermS21/question2/fall-2021/cis125/book/cis125book.pdf
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/cis125notes.md ~/midtermS21/question2/fall-2021/cis125/notes/cis125notes.md
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/cis125syllabus.docx ~/midtermS21/question2/fall-2021/cis125/syllabus/cis125syllabus.docx
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/en102_all_assignments.txt ~/midtermS21/question2/fall-2021/en102/assignments/en102_all_assignments.txt
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/en102book.pdf ~/midtermS21/question2/fall-2021/en102/book/en102book.pdf
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/en102notes.md ~/midtermS21/question2/fall-2021/en102/notes/en102notes.md
[nouran@nouran-VirtualBox:~/midtermS21/question2]
$ mv ~/midtermS21/question2/question2/en102syllabus.docx ~/midtermS21/question2/fall-2021/en102/syllabus/en102syllabus.docx
[nouran@nouran-VirtualBox:~/midtermS21/question2]

[nouran@nouran-VirtualBox:~/midtermS21/question3]
$ wget https://robertalberto.com/cis106/midtermfiles/maria-college-files.tar.xz
--2021-04-28 17:38:20 (21.4 MB/s) - 'maria-college-files.tar.xz' saved [27287876/27287876]

[nouran@nouran-VirtualBox:~/midtermS21/question3]
$ tar xf maria-college-files.tar.xz
[nouran@nouran-VirtualBox:~/midtermS21/question3]
$ rm maria-college-files.tar.xz
[nouran@nouran-VirtualBox:~/midtermS21/question3]
$ ls
maria-college-files
[nouran@nouran-VirtualBox:~/midtermS21/question4]
$ mkdir {exe,pdf,txt,html,docx,png,jpg,xls}

```

```
[nouran@nouran-VirtualBox:~/midtermS21]
[nouran@nouran-VirtualBox:~/midtermS21/question4]
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  wget https://robertalberto.com/cis106/midtermfiles/maria-colleague-files.tar.xz
--2021-04-29 10:45:19-- https://robertalberto.com/cis106/midtermfiles/maria-colleague-files.tar.xz
Resolving robertalberto.com (robertalberto.com)... 34.66.0.162
Connecting to robertalberto.com (robertalberto.com)|34.66.0.162|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 27287876 (26M) [application/x-xz]
Saving to: 'maria-colleague-files.tar.xz'

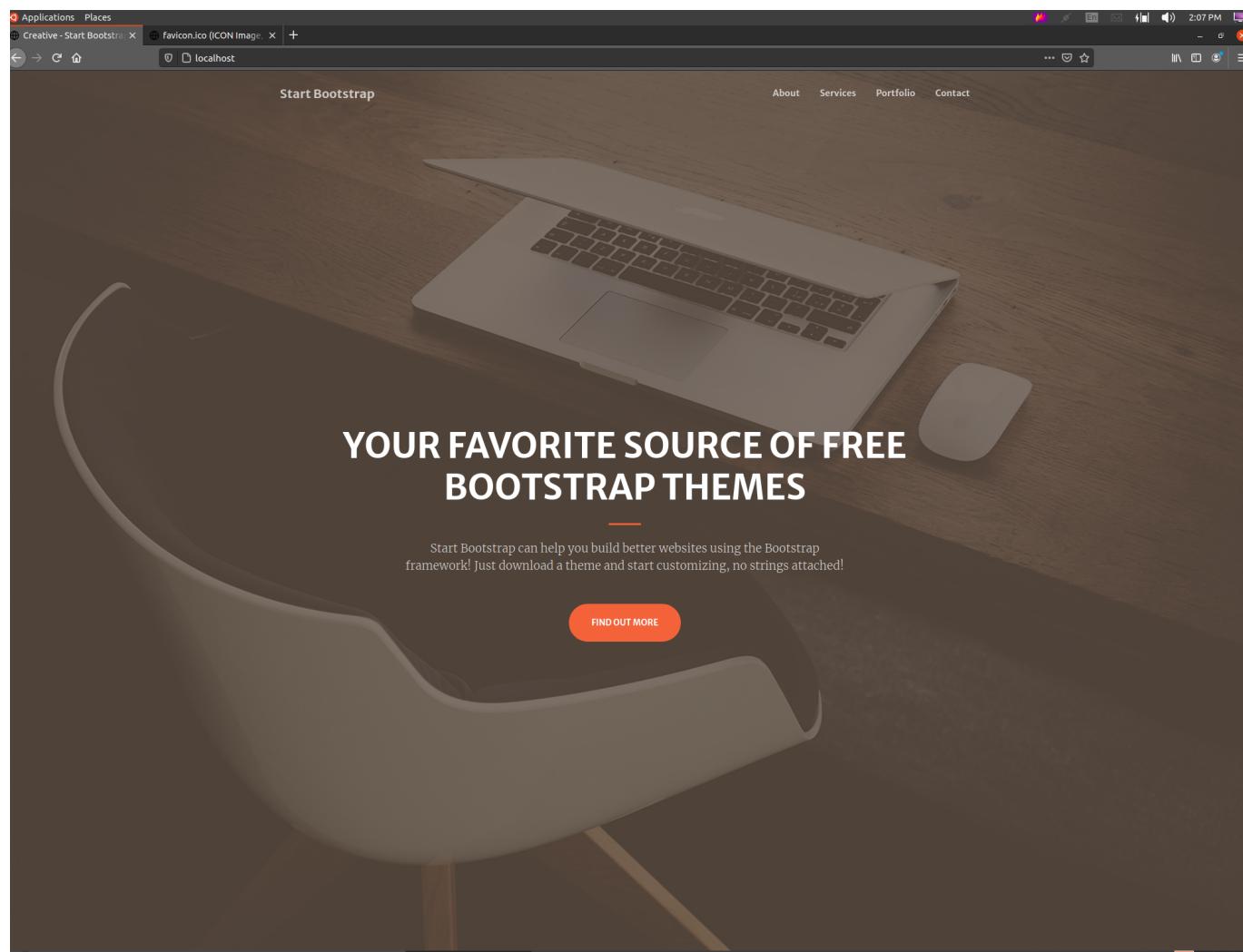
maria-colleague-files.tar.xz          100%[=====] 26.02M 31.9MB/s   in 0.8s
2021-04-29 10:45:20 (31.9 MB/s) - 'maria-colleague-files.tar.xz' saved [27287876/27287876]

[nouran@nouran-VirtualBox:~/midtermS21/question4]
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  tar -xf maria-colleague-files.tar.xz
[nouran@nouran-VirtualBox:~/midtermS21/question4]
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  rm maria-colleague-files.tar.xz
[nouran@nouran-VirtualBox:~/midtermS21/question4]

[nouran@nouran-VirtualBox:~/midtermS21/question4]
  touch all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  echo "this is a list of pdf files" >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  ls -Xla maria-colleague-files/ | grep pdf >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  echo "this is a list of exe files" >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  ls -Xla maria-colleague-files/ | grep exe >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  echo "this is a list of docx files" >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  ls -Xla maria-colleague-files/ | grep docx >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  echo "this is a list of xls files" >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  ls -Xla maria-colleague-files/ | grep xls >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  echo "this is a list of txt files" >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  ls -Xla maria-colleague-files/ | grep txt >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  echo "this is a list of html files" >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  ls -Xla maria-colleague-files/ | grep html >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  echo "this is a list of png files" >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  ls -Xla maria-colleague-files/ | grep png >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  echo "this is a list of jpg files" >> all-files-org.md
[nouran@nouran-VirtualBox:~/midtermS21/question4]
  ls -Xla maria-colleague-files/ | grep jpg >> all-files-org.md
```

Question 5

```
nouran@nouran-VirtualBox:~/midtermS21/question2]
$tree fall-2021/
fall-2021/
bu101
├── assignments
│   └── bu101_all_assignments.txt
├── book
│   └── bu101book.pdf
├── notes
│   └── bu101notes.md
└── syllabus
    └── bu101syllabus.docx
cis108
├── assignments
│   └── cis108_all_assignments.txt
├── book
│   └── cis108book.pdf
├── notes
│   └── cis108notes.md
└── syllabus
    └── cis108syllabus.docx
cis125
├── assignments
│   └── cis125_all_assignments.txt
├── book
│   └── cis125book.pdf
├── notes
│   └── cis125notes.md
└── syllabus
    └── cis125syllabus.docx
en102
├── assignments
│   └── en102_all_assignments.txt
├── book
│   └── en102book.pdf
├── notes
│   └── en102notes.md
└── syllabus
    └── en102syllabus.docx
20 directories, 16 files
```



```
root@nouran-Virtual... Pictures 4.png Creative-Start Boots...
[nouran@nouran-VirtualBox:~/midtermS21/question5]
$wget https://robertalberto.com/cis106/midtermfiles/samplesite2.tar.gz
--2021-04-29 13:05:35-- https://robertalberto.com/cis106/midtermfiles/samplesite2.tar.gz
Resolving robertalberto.com (robertalberto.com)... 34.66.0.162
Connecting to robertalberto.com (robertalberto.com)|34.66.0.162|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1202054 (1.1M) [application/x-gzip]
Saving to: 'samplesite2.tar.gz'

samplesite2.tar.gz          100%[=====] 1.15M 3.91MB/s in 0.3s
2021-04-29 13:05:36 (3.91 MB/s) - 'samplesite2.tar.gz' saved [1202054/1202054]

[nouran@nouran-VirtualBox:~/midtermS21/question5]
$tar -xf samplesite2.tar.gz
[nouran@nouran-VirtualBox:~/midtermS21/question5]
$ls
samplesite2 samplesite2.tar.gz
```

```
nouran@nouran-VirtualBox:~/midtermS21/question5]
└─$ sudo apt-get install apache2
[sudo] password for nouran:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  apport-symptoms guile-2.2-libs libevent-2.1-7 libgccl2 libgnome-games-support-1-3 libgnome-games-support-common libnatpmp1 libqwing2v5
  linux-headers-5.8.0-43-generic linux-hwe-5.8-headers-5.8.0-43 linux-image-5.8.0-43-generic linux-modules-5.8.0-43-generic linux-modules-extra-5.8.0-43-generic
  python3-systemd
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil libaprutil-dbd-sqlite3 libaprutil-ldap
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1 libaprutil libaprutil-dbd-sqlite3 libaprutil-ldap
Upgraded, 8 newly installed, 0 to remove and 108 not upgraded.
Need to get 1,713 kB of archives.
After this operation, 7,494 kB of additional disk space will be used.

nouran@nouran-VirtualBox:~/midtermS21/question5]
└─$ cd /var/www/html/
nouran@nouran-VirtualBox:~/var/www/html]
└─$ mv index.html index.html.bk
[!] nouran@nouran-VirtualBox:~/midtermS21/question5]
└─$ sudo cp -R samplesite2/* /var/www/html/
nouran@nouran-VirtualBox:~/var/www/html]
└─$ ls
index.html
[!] nouran@nouran-VirtualBox:~/midtermS21/question5]
└─$ sudo cp -R samplesite2/* /var/www/html/
nouran@nouran-VirtualBox:~/var/www/html]
└─$ ls
index.html
[!] nouran@nouran-VirtualBox:~/midtermS21/question5]
└─$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
[!] nouran@nouran-VirtualBox:~/midtermS21/question5]
└─$ sudo systemctl restart apache2
```

Question 6

```
[!] nouran@nouran-VirtualBox:~/midtermS21/question6]
└─$ du -ch /etc/shadow /etc/passwd /usr/share/dict/american-english ~/.bashrc | grep total$
968K      total

[!] nouran@nouran-VirtualBox:~/midtermS21/question6]
└─$ du -ch /etc/shadow /etc/passwd /usr/share/dict/american-english ~/.bashrc | grep total > sizes
[!] nouran@nouran-VirtualBox:~/midtermS21/question6]
└─$ cat sizes
68K      total
[!] nouran@nouran-VirtualBox:~/midtermS21/question6]
```

Question 7

```
[!] nouran@nouran-VirtualBox:~/midtermS21/question7]
└─$ ls -i ytqderzoa5w61.jpg
121886 ytqderzoa5w61.jpg
nouran@nouran-VirtualBox:~/midtermS21/question7]
└─$ mv ytqderzoa5w61.jpg /usr/share/backgrounds/newpicname
[!] nouran@nouran-VirtualBox:~/midtermS21/question7]
└─$ ls -lah ytqderzoa5w61.jpg
rw-r--r-- 1 nouran nouran 421K Apr 29 13:12 ytqderzoa5w61.jpg
```

Question 8

```
[!] nouran@nouran-VirtualBox:~/midtermS21/question8]
└─$ mkdir midterm-q8
nouran@nouran-VirtualBox:~/midtermS21/question8]
└─$ 
[!] nouran@nouran-VirtualBox:~/midtermS21/question8]
└─$ ls -lha midterm-q8/marvel-movies/*[A-z].jpeg | cut -c13-
nouran nouran 18K Apr 29 18:09 midterm-q8/marvel-movies/ant-man-and-the-wasp.jpeg
nouran nouran 19K Apr 29 18:09 midterm-q8/marvel-movies/ant-man.jpeg
nouran nouran 23K Apr 29 18:09 midterm-q8/marvel-movies/avengers-age-of-ultron.jpeg
nouran nouran 24K Apr 29 18:09 midterm-q8/marvel-movies/avengers-endgame.jpeg
nouran nouran 23K Apr 29 18:09 midterm-q8/marvel-movies/avengers-infinity-war.jpeg
nouran nouran 21K Apr 29 18:09 midterm-q8/marvel-movies/avengers.jpeg
nouran nouran 23K Apr 29 18:09 midterm-q8/marvel-movies/black-panther.jpeg
nouran nouran 21K Apr 29 18:09 midterm-q8/marvel-movies/captain-america-civil-war.jpeg
nouran nouran 18K Apr 29 18:09 midterm-q8/marvel-movies/captain-america-the-first-avenger.jpeg
nouran nouran 19K Apr 29 18:09 midterm-q8/marvel-movies/captain-america-the-winter-soldier.jpeg
nouran nouran 20K Apr 29 18:09 midterm-q8/marvel-movies/captain-marvel.jpeg
nouran nouran 24K Apr 29 18:09 midterm-q8/marvel-movies/doctor-strange.jpeg
nouran nouran 17K Apr 29 18:09 midterm-q8/marvel-movies/iron-man.jpeg
nouran nouran 20K Apr 29 18:09 midterm-q8/marvel-movies/spiderman-far-way-from-home.jpeg
nouran nouran 19K Apr 29 18:09 midterm-q8/marvel-movies/spiderman-homecoming.jpeg
nouran nouran 18K Apr 29 18:09 midterm-q8/marvel-movies/the-incredible-hulk.jpeg
nouran nouran 17K Apr 29 18:09 midterm-q8/marvel-movies/thor.jpeg
nouran nouran 26K Apr 29 18:09 midterm-q8/marvel-movies/thor-ragnarok.jpeg
nouran nouran 18K Apr 29 18:09 midterm-q8/marvel-movies/thor-the-dark-world.jpeg
[!] nouran@nouran-VirtualBox:~/midtermS21/question8]
└─$ 

[!] nouran@nouran-VirtualBox:~/midtermS21/question8]
└─$ ls -d midterm-q8/marvel-movies/*
midterm-q8/marvel-movies/ant-man/          midterm-q8/marvel-movies/captain-america/    midterm-q8/marvel-movies/guardians-of-the-galaxy/   midterm-q8/marvel-movies/the-incredible-hulk/
midterm-q8/marvel-movies/avengers/          midterm-q8/marvel-movies/captain-marvel/     midterm-q8/marvel-movies/iron-man/        midterm-q8/marvel-movies/thor/
midterm-q8/marvel-movies/black-panther/    midterm-q8/marvel-movies/doctor-strange/    midterm-q8/marvel-movies/spiderman/
```

Question 9

```
nouran@nouran-VirtualBox:~/Midterm521/question9$ ls midterm-q9/videogame-consoles/*.(1980..1999).jpeg
s: cannot access "midterm-q9/videogame-consoles/*-1981.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1982.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1984.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1985.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1986.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1987.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1988.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1989.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1991.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1992.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1993.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1995.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1997.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1998.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-1999.jpeg": No such file or directory
midterm-q9/videogame-consoles/Nintendo-64-1996.jpeg          midterm-q9/videogame-consoles/PlayStation-1-1994.jpeg
midterm-q9/videogame-consoles/nintendo-color-tv-game-1977-1980.jpeg  midterm-q9/videogame-consoles/Super-Nintendo-Entertainment-System-1990.jpeg
midterm-q9/videogame-consoles/nintendo-entertainment-system-1983.jpeg

[...] [nouran@nouran-VirtualBox:~/Midterm521/question9]

[...] [nouran@nouran-VirtualBox:~/Midterm521/question9]
$ ls midterm-q9/videogame-consoles/*.{2000..2009}.jpeg
s: cannot access "midterm-q9/videogame-consoles/*-2000.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-2002.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-2003.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-2004.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-2007.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-2008.jpeg": No such file or directory
s: cannot access "midterm-q9/videogame-consoles/*-2009.jpeg": No such file or directory
midterm-q9/videogame-consoles/Nintendo-GameCube-2001.jpeg   midterm-q9/videogame-consoles/Playstation-3-2006.jpeg   midterm-q9/videogame-consoles/Xbox-360-2005.jpeg
midterm-q9/videogame-consoles/nintendo-wii-2006.jpeg        midterm-q9/videogame-consoles/X-box-2001.jpeg

[...] [nouran@nouran-VirtualBox:~/Midterm521/question9]
$ scp midterm-q9/videogame-consoles/*.{1990..1999}.jpeg midterm-q9/videogame-consoles/1990/
cp: cannot stat "midterm-q9/videogame-consoles/*-1991.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-1992.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-1993.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-1995.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-1997.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-1998.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-1999.jpeg": No such file or directory
[...] [nouran@nouran-VirtualBox:~/Midterm521/question9]
$ scp midterm-q9/videogame-consoles/*.{2000..2009}.jpeg midterm-q9/videogame-consoles/2000/
cp: cannot stat "midterm-q9/videogame-consoles/*-2000.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2002.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2003.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2004.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2007.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2008.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2009.jpeg": No such file or directory
[...] [nouran@nouran-VirtualBox:~/Midterm521/question9]
$ scp midterm-q9/videogame-consoles/*.{2010..2019}.jpeg midterm-q9/videogame-consoles/2010/
cp: cannot stat "midterm-q9/videogame-consoles/*-2010.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2011.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2014.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2015.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2016.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2018.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2019.jpeg": No such file or directory
[...] [nouran@nouran-VirtualBox:~/Midterm521/question9]
$ scp midterm-q9/videogame-consoles/*.{2020..2029}.jpeg midterm-q9/videogame-consoles/2020/
cp: cannot stat "midterm-q9/videogame-consoles/*-2021.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2022.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2023.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2024.jpeg": No such file or directory
cp: cannot stat "midterm-q9/videogame-consoles/*-2025.jpeg": No such file or directory

[...] [nouran@nouran-VirtualBox:~/Midterm521/question9]
$ tree midterm-q9/videogame-consoles/
videogame-consoles/
└── 1980
    ├── nintendo-color-tv-game-1977-1980.jpeg
    └── nintendo-entertainment-system-1983.jpeg
└── 1990
    ├── Nintendo-64-1996.jpeg
    ├── PlayStation-1-1994.jpeg
    └── Super-Nintendo-Entertainment-System-1990.jpeg
└── 2000
    ├── Nintendo-GameCube-2001.jpeg
    ├── nintendo-Wii-2006.jpeg
    ├── Playstation-3-2006.jpeg
    ├── X-box-2001.jpeg
    └── Xbox-360-2005.jpeg
└── 2010
    ├── Nintendo-Switch-2017.jpeg
    ├── nintendo-Wii-U-2012.jpeg
    ├── Playstation-4-2013.jpeg
    └── Xbox-One-2013.jpeg
└── 2020
    ├── PlayStation-5-2020.jpeg
    ├── Nintendo-64-1996.jpeg
    ├── nintendo-color-tv-game-1977-1980.jpeg
    ├── nintendo-entertainment-system-1983.jpeg
    ├── Nintendo-GameCube-2001.jpeg
    ├── Nintendo-Switch-2017.jpeg
    ├── nintendo-Wii-2006.jpeg
    ├── nintendo-Wii-U-2012.jpeg
    ├── Playstation-1-1994.jpeg
    ├── Playstation-2-2000-.jpeg
    ├── Playstation-3-2006.jpeg
    ├── Playstation-4-2013.jpeg
    ├── Playstation-5-2020.jpeg
    └── Super-Nintendo-Entertainment-System-1990.jpeg
└── X-box-2001.jpeg
└── Xbox-360-2005.jpeg
└── Xbox-One-2013.jpeg
└── Xbox-series-X-2020.jpg

0 directories, 32 files
```

Question 10

- 1.Which was the hardest question? Why? Question was the hardest for me because you asked for single command it took me almost 4 hours to find an answer though used something different from what we took during the class.
- 2.Which was the easiest question? Why? ofcourse question 7 because it was straight forward.
- 3.What could have made this midterm easier?

- maybe if it was shorter!
-
- 4.On a scale from 1 to 5 (1 meaning nothing at all and5 meaning a lot more than you thought), how much have you learned about Linux? 3
- 5.In your opinion, do you think this format of the examinationis better or worse than the traditional exams? Atraditional exam is in the form of true or false questionsand selects the right answer or short explanations. i think this way way because it allowed me to try different way then chose the right answer.