

Command Line in Windows

-dir

Ans 2 files(.condarc 25 bytes, .packettracer 180 bytes), 30 directories

```

Microsoft Windows [Version 10.0.19045.4780]
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C:\Users\Student>dir
Volume in drive C has no label.
Volume Serial Number is A696-5FA6

Directory of C:\Users\Student

07/23/2024 10:41 AM <DIR>      .
07/23/2024 10:41 AM <DIR>      ..
07/01/2024 04:38 PM <DIR>      .anaconda
07/01/2024 01:53 PM <DIR>      .cache
07/02/2024 10:52 AM <DIR>      .chocolatey
07/01/2024 04:50 PM <DIR>      .conda
07/01/2024 04:38 PM <DIR>      25 .condarc
07/01/2024 04:38 PM <DIR>      .continuum
07/01/2024 01:53 PM <DIR>      .eclipse
07/23/2024 09:43 AM <DIR>      .ms-ad
07/01/2024 01:53 PM <DIR>      .p2
07/01/2024 02:01 PM <DIR>      180 .packettracer
08/06/2024 03:01 PM <DIR>      .VirtualBox
06/28/2024 03:05 PM <DIR>      .vscode
06/27/2024 11:51 AM <DIR>      3D Objects
07/01/2024 02:03 PM <DIR>      Cisco Packet Tracer 8.2.2
06/27/2024 11:51 AM <DIR>      Contacts
08/19/2024 08:27 AM <DIR>      Desktop
08/06/2024 02:48 PM <DIR>      Documents
08/19/2024 09:14 AM <DIR>      Downloads
07/01/2024 01:26 PM <DIR>      eclipse
07/01/2024 01:52 PM <DIR>      eclipse-workspace
06/27/2024 11:51 AM <DIR>      Favorites
06/27/2024 11:51 AM <DIR>      Links
06/27/2024 11:51 AM <DIR>      Music
06/27/2024 11:54 AM <DIR>      OneDrive
06/27/2024 11:51 AM <DIR>      Pictures
07/02/2024 10:45 AM <DIR>      Postman
06/27/2024 11:51 AM <DIR>      Saved Games
06/27/2024 11:53 AM <DIR>      Searches
06/28/2024 01:29 PM <DIR>      Videos
07/19/2024 04:33 PM <DIR>      VirtualBox VMs

2 File(s)                205 bytes
30 Dir(s) 80,607,936,512 bytes free

```

-dir/p

```

C:\Users\Student>dir/p
Volume in drive C has no label.
Volume Serial Number is A696-5FA6

Directory of C:\Users\Student

07/23/2024 10:41 AM <DIR>      .
07/23/2024 10:41 AM <DIR>      ..
07/01/2024 04:38 PM <DIR>      .anaconda
07/01/2024 01:53 PM <DIR>      .cache
07/02/2024 10:52 AM <DIR>      .chocolatey
07/01/2024 04:50 PM <DIR>      .conda
07/01/2024 04:38 PM <DIR>      25 .condarc
07/01/2024 04:38 PM <DIR>      .continuum
07/01/2024 01:53 PM <DIR>      .eclipse
07/23/2024 09:43 AM <DIR>      .ms-ad
07/01/2024 01:53 PM <DIR>      .p2
07/01/2024 02:01 PM <DIR>      180 .packettracer
08/06/2024 03:01 PM <DIR>      .VirtualBox
06/28/2024 03:05 PM <DIR>      .vscode
06/27/2024 11:51 AM <DIR>      3D Objects
07/01/2024 02:03 PM <DIR>      Cisco Packet Tracer 8.2.2
06/27/2024 11:51 AM <DIR>      Contacts
08/19/2024 08:27 AM <DIR>      Desktop
08/06/2024 02:48 PM <DIR>      Documents
08/19/2024 09:14 AM <DIR>      Downloads
07/01/2024 01:26 PM <DIR>      eclipse
07/01/2024 01:52 PM <DIR>      eclipse-workspace
06/27/2024 11:51 AM <DIR>      Favorites
06/27/2024 11:51 AM <DIR>      Links

Press any key to continue . . .

```

-cd desktop

Ans คำสั่ง cd คือ เปลี่ยน directory

Desktop คือ directory ชื่อ Desktop

```
06/27/2024 11:51 AM <DIR> Music
06/27/2024 11:54 AM <DIR> OneDrive
06/27/2024 11:51 AM <DIR> Pictures
07/02/2024 10:45 AM <DIR> Postman
06/27/2024 11:51 AM <DIR> Saved Games
06/27/2024 11:53 AM <DIR> Searches
06/28/2024 01:29 PM <DIR> Videos
07/19/2024 04:33 PM <DIR> VirtualBox VMs
                2 File(s)                205 bytes
                30 Dir(s) 81,363,763,200 bytes free

C:\Users\Student> cd Desktop
C:\Users\Student\Desktop>
```

-cd/, c:\

Ans cd / คือ เปลี่ยน directory ไปยัง root directory

C:\ คือ root directory ของ drive C

```
C:\Users\Student\Desktop>cd /
C:\>dir
Volume in drive C has no label.
Volume Serial Number is A696-5FA6

Directory of C:\

08/20/2024 01:48 PM <DIR> Intel
07/02/2024 01:09 PM <DIR> MinGW
06/28/2024 01:03 AM <DIR> PerfLogs
08/20/2024 01:49 PM <DIR> Program Files
07/19/2024 01:28 PM <DIR> Program Files (x86)
07/15/2024 05:52 AM <DIR> Python312
07/23/2024 11:08 AM <DIR> ub
06/27/2024 11:51 AM <DIR> Users
08/19/2024 04:39 PM <DIR> Windows
                0 File(s)                0 bytes
                9 Dir(s) 80,598,138,880 bytes free

C:\>
```

Command Line in Linux

```

babyearn@babyearn:~$ pwd
/home/babyearn
babyearn@babyearn:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos

```

Ans

Path ปัจจุบัน คือ /home/babyearn

จำนวน file = 0

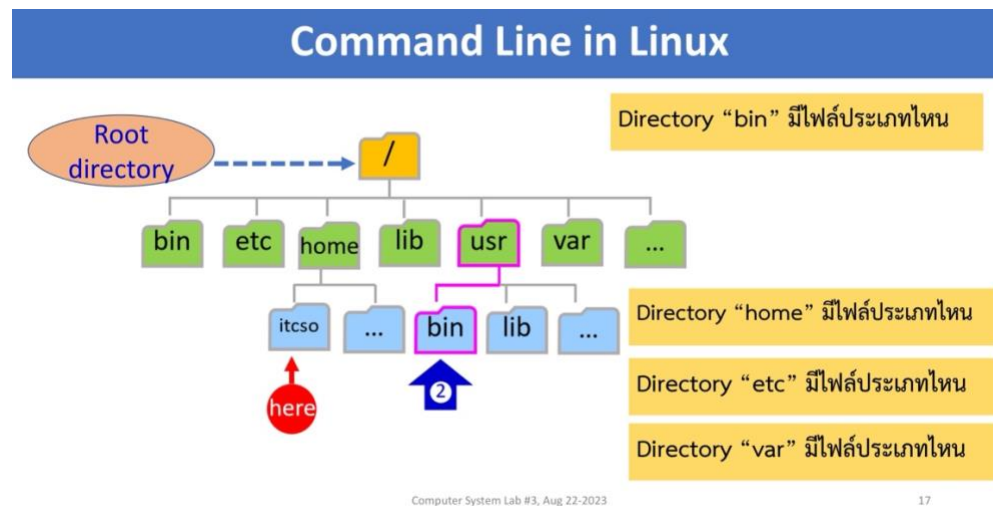
จำนวน directory = 8

- cd ใช้ในการเปลี่ยน directory

```

babyearn@babyearn:~$ pwd
/home/babyearn
babyearn@babyearn:~$ cd /
babyearn@babyearn:/$ pwd
/
babyearn@babyearn:/$ ls
bin  bin.usr-is-merged  boot  cdrom  dev  etc  home  lib  lib.usr-is-merged  lost+found  media  mnt  opt  proc  root  run  sbin  sbin.usr-is-merged  snap  srv  swap.img  sys  tmp  usr  var
babyearn@babyearn:/$ cd
babyearn@babyearn:~$ pwd
/home/babyearn
babyearn@babyearn:~$ cd ..
babyearn@babyearn:/home$ pwd
/home
babyearn@babyearn:/home$ cd
babyearn@babyearn:~$ pwd
/home/babyearn

```



Exercise

Directory "bin" มีไฟล์ประเภทไหน

Ans Binary, Original user command

Directory "home" มีไฟล์ประเภทไหน

Ans เก็บข้อมูลส่วนตัว User

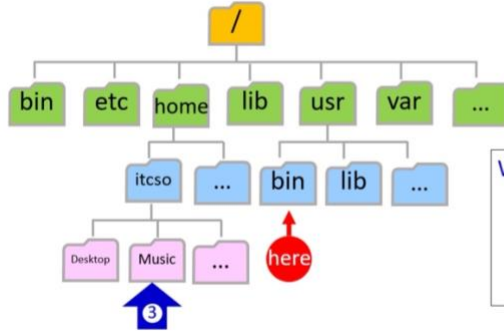
Directory "etc" มีไฟล์ประเภทไหน

Ans เก็บ System

Directory "var" มีไฟล์ประเภทไหน

Ans เก็บ variable (log)

Command Line in Linux



- Now we are now at "bin" directory
- How to move to the "music" directory

Write your answer:

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18

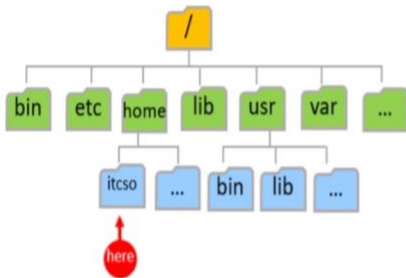
Ans

```

babyeard@babyeard:~/usr/bin$ pwd
/usr/bin
babyeard@babyeard:~/usr/bin$ cd ../../home/babyeard/Music/
babyeard@babyeard:~/Music$ pwd
/home/babyeard/Music

```

Command Line in Linux



Now at your home directory "itcso"
Write current directory after you use these commands:

\$ cd ..

Answer :

\$ cd ../../

Answer :

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20

Ans

```

babyeard@babyeard:~$ cd ..
babyeard@babyeard:/home$ cd ../../
babyeard@babyeard:/$

```

Command Line in Linux

Exercise

- Show current directory

Write command : `pwd`

- Which command for going to your home directory

Write command : `cd`

- Create directory "ict" at your home directory

Write command : `mkdir ict`

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21

Command Line in Linux

Exercise

- Change to "ict" directory

Write command : `cd ict`

- Download file historyofict.txt at
<http://www.ict.mahidol.ac.th/historyofict.txt>

Command : `$ wget http://www.ict.mahidol.ac.th/historyofict.txt`

Write command : `wget http://www.ict.mahidol.ac.th/historyofict.txt`

- Show file in "ict" directory

Write command : `ls -l`

Computer System Lab #3, Aug 22-2023

22

Exercise

```

babyearn@babyearn:~$ ls
Desktop Documents Downloads ict Music Pictures Public Templates Videos
babyearn@babyearn:~$ cd ict
babyearn@babyearn:~/ict$ wget http://www.ict.mahidol.ac.th/historyofict.txt
--2024-08-20 07:11:56-- http://www.ict.mahidol.ac.th/historyofict.txt
Resolving www.ict.mahidol.ac.th (www.ict.mahidol.ac.th)... 10.34.101.80
Connecting to www.ict.mahidol.ac.th (www.ict.mahidol.ac.th)|10.34.101.80|:80... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://www.ict.mahidol.ac.th/historyofict.txt [following]
--2024-08-20 07:11:56-- https://www.ict.mahidol.ac.th/historyofict.txt
Connecting to www.ict.mahidol.ac.th (www.ict.mahidol.ac.th)|10.34.101.80|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3754 (3.7K) [text/plain]
Saving to: 'historyofict.txt'

historyofict.txt                               100%[=====]

2024-08-20 07:11:57 (201 MB/s) - 'historyofict.txt' saved [3754/3754]

babyearn@babyearn:~/ict$ ls
historyofict.txt
babyearn@babyearn:~/ict$

```


Commands to display contents of a file

\$cat [option] <file name>

```
babyearn@babyearn:~/ict$ cat historyofict.txt
Established on 20th May 2009,
the Faculty of Information and Communication Technology
stems from the Department of Computer Science under
the Faculty of Science and Computing Center,
which have cooperatively worked together in
the development of computing infrastructure and software
for university administration and in computing research since 1988.
Recognizing the significance of information and communication
technology development in Thailand, Mahidol University
has established the Faculty of ICT with the mission to meet
the growing domestic and global needs for qualified human
resources in computer technology.

Areas in Information and Communication Technology have
grown to encompass many aspects of computing technologies,
and it now covers many emerging technologies such as cloud
computing, data analysis embedded systems, software engineering,
and intelligent systems.

Today the demand for ICT professionals is greater than ever,
and graduates are required to have both background in theoretical
concepts and practical experience. The main mission of the
Faculty of ICT is to produce computer scientists and
ICT professionals having high research and development caliber.
```

\$more [option] <file name>

```
babyearn@babyearn:~/ict$ more historyofict.txt
Established on 20th May 2009,
the Faculty of Information and Communication Technology
stems from the Department of Computer Science under
the Faculty of Science and Computing Center,
which have cooperatively worked together in
the development of computing infrastructure and software
for university administration and in computing research since 1988.
Recognizing the significance of information and communication
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resources in computer technology.

Areas in Information and Communication Technology have
grown to encompass many aspects of computing technologies,
and it now covers many emerging technologies such as cloud
computing, data analysis embedded systems, software engineering,
and intelligent systems.
```

\$head [option] <file name>

```
babyearn@babyearn:~/ict$ head historyofict.txt
Established on 20th May 2009,
the Faculty of Information and Communication Technology
stems from the Department of Computer Science under
the Faculty of Science and Computing Center,
which have cooperatively worked together in
the development of computing infrastructure and software
for university administration and in computing research since 1988.
Recognizing the significance of information and communication
technology development in Thailand, Mahidol University
has established the Faculty of ICT with the mission to meet
babyearn@babyearn:~/ict$ head -3 historyofict.txt
Established on 20th May 2009,
the Faculty of Information and Communication Technology
stems from the Department of Computer Science under
```

\$tail [option] <file name>

```
babyearn@babyearn:~/ict$ tail historyofict.txt
in various ICT fields through our 8 major tracks.
All tracks play a crucial role in all aspects of modern society

ICT Mahidol Research Clusters
Software Engineering and Business Analytics Research Clusters (SEBA)
Technology Enhanced Learning and Human Centered Computing Research Clusters(TEL-HuCC)
Machine Intelligence and Knowledge Engineering Research Clusters (MIKE)
Medical Informatics Research Clusters (MI)
Cyber Security and IoT Research Clusters(CSI)
babyearn@babyearn:~/ict$ tail -2 historyofict.txt
Medical Informatics Research Clusters (MI)
Cyber Security and IoT Research Clusters(CSI)
```

Exercise เปรียบเทียบความแตกต่างระหว่างคำสั่งต่อไปนี้

- \$ cat - แสดงเนื้อหาของไฟล์ทั้งหมด
- \$ more - แสดงเนื้อหาไฟล์ทีละส่วน มักจะแสดงผลทีละหน้า
- \$ head - แสดงเนื้อหาส่วนต้นของไฟล์ สามารถกำหนดจำนวนบรรทัดที่ต้องการแสดงได้ด้วย -n
- \$ tail - แสดงเนื้อหาส่วนท้ายของไฟล์ สามารถกำหนดจำนวนบรรทัดที่ต้องการแสดงได้ด้วย -n

Commands to determine the type of a file

\$file <file name>

```

babyearn@babyearn:~/ict$ ls
historyofict.txt
babyearn@babyearn:~/ict$ file historyofict.txt
historyofict.txt: Unicode text, UTF-8 text
babyearn@babyearn:~/ict$ file /usr/bin/ls
/usr/bin/ls: ELF 64-bit LSB pie executable, ARM aarch64, version 1 (SYSV), dynamically linked, interpreter /lib/ld-linux-aarch64.so.1, BuildID[sha1]=fec30f5745c2582aaf143e7079d3bb46ca7a010f, for GNU/Linux 3.7.0, stripped
babyearn@babyearn:~/ict$ file ../Music/
../Music/: directory
babyearn@babyearn:~/ict$

```

\$touch <file name>

```

babyearn@babyearn:~/ict$ ls
historyofict.txt
babyearn@babyearn:~/ict$ > test1
babyearn@babyearn:~/ict$ ls
historyofict.txt test1
babyearn@babyearn:~/ict$ file test1
test1: empty
babyearn@babyearn:~/ict$ touch test2
babyearn@babyearn:~/ict$ file test2
test2: empty
babyearn@babyearn:~/ict$ echo -n > test3
babyearn@babyearn:~/ict$ file test3
test3: empty
babyearn@babyearn:~/ict$ ls
historyofict.txt test1 test2 test3
babyearn@babyearn:~/ict$

```

ถ้ามีไฟล์ test อยู่แล้ว การใช้คำสั่ง \$ touch test

มีผลอย่างไร

Ans อัปเดตเวลาที่ไฟล์ถูกแก้ไขล่าสุดหากไฟล์มีอยู่แล้ว

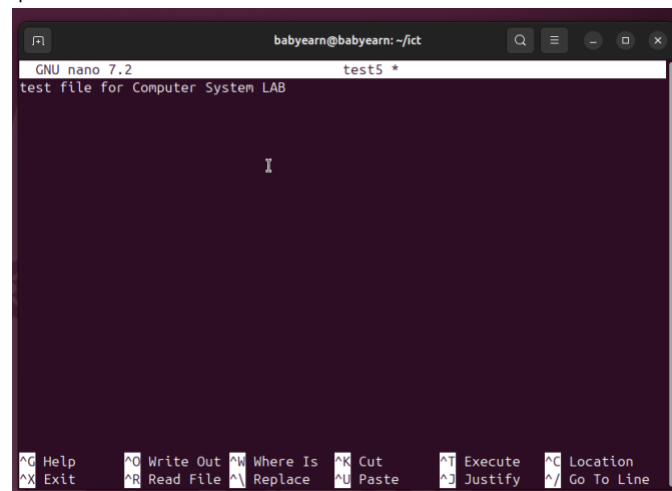
\$echo "some text" > <file name>

```

babyearn@babyearn:~/ict$ echo "Computer System LAB" > test4
babyearn@babyearn:~/ict$ file test4
test4: ASCII text
babyearn@babyearn:~/ict$

```

\$nano <file name>



```

GNU nano 7.2      test5 *
test file for Computer System LAB

I

^G Help      ^O Write Out  ^W Where Is   ^X Cut        ^T Execute    ^C Location
^X Exit      ^R Read File  ^U Replace    ^N Paste      ^J Justify    ^_ Go To Line

```


Commands to copy a file

\$cp <source file name> <destination file name>

```
babyearn@babyearn:~/ict$ ls
historyofict.txt test test1 test2 test3 test4 test5
babyearn@babyearn:~/ict$ cp test4 myfile4
babyearn@babyearn:~/ict$ ls
historyofict.txt myfile4 test test1 test2 test3 test4 test5
babyearn@babyearn:~/ict$
```

Commands to change name (rename) of a file

\$mv <source file name> <destination file name>

```
babyearn@babyearn:~/ict$ ls
historyofict.txt myfile4 test test1 test2 test3 test4 test5
babyearn@babyearn:~/ict$ mv test5 myfile5
babyearn@babyearn:~/ict$ ls
historyofict.txt myfile4 myfile5 test test1 test2 test3 test4
babyearn@babyearn:~/ict$
```

Commands to delete a file

\$rm <file name>

```
babyearn@babyearn:~/ict$ rm test3
babyearn@babyearn:~/ict$ ls
historyofict.txt myfile4 myfile5 test test1 test2 test4
babyearn@babyearn:~/ict$ rm test?
babyearn@babyearn:~/ict$ ls
historyofict.txt myfile4 myfile5 test
babyearn@babyearn:~/ict$ rm test
babyearn@babyearn:~/ict$ ls
historyofict.txt myfile4 myfile5
babyearn@babyearn:~/ict$
```

Commands to search text in a file

\$grep "text" <file name>

```
babyearn@babyearn:~/ict$ ls
historyofict.txt myfile4 myfile5
babyearn@babyearn:~/ict$ grep one historyofict.txt
"ONE ICT: Go forward together as one"
babyearn@babyearn:~/ict$ grep lab myfile4
babyearn@babyearn:~/ict$ grep Lab myfile4
babyearn@babyearn:~/ict$ grep LAB myfile4
Computer System LAB
babyearn@babyearn:~/ict$ grep LAB myfile?
myfile4:Computer System LAB
myfile5:test file for Computer System LAB
babyearn@babyearn:~/ict$ grep Computer *
historyofict.txt:stems from the Department of Computer Science under
historyofict.txt:Computers are available in several computer labs to support
myfile4:Computer System LAB
myfile5:test file for Computer System LAB
babyearn@babyearn:~/ict$
```