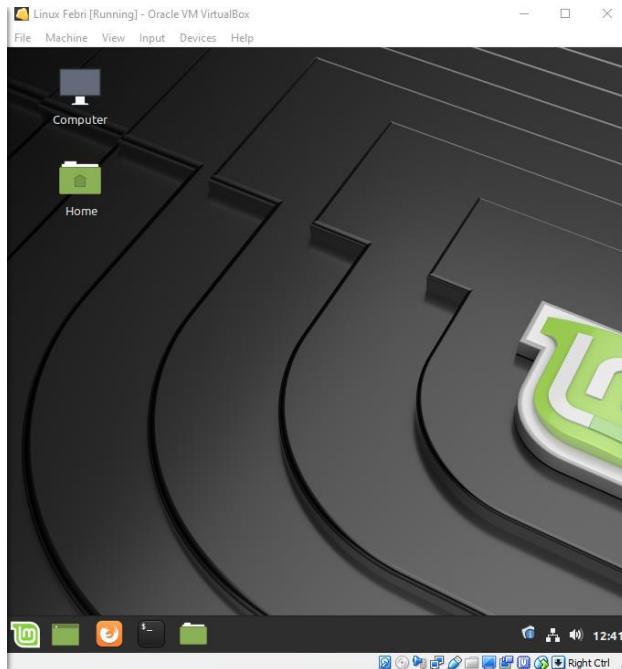


1. Setelah masuk ke dalam virtual box, lalu masuk ke dalam terminal

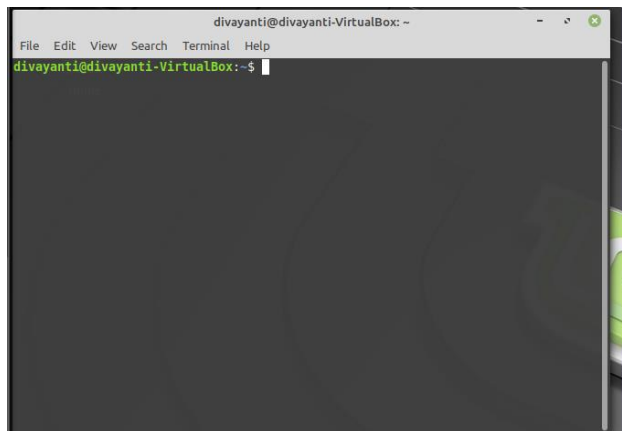


Nama : Divayanti Febri Sakina

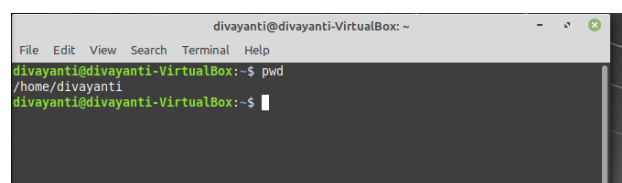
NPM : 210831010099

Kelas : Sistem Operasi B

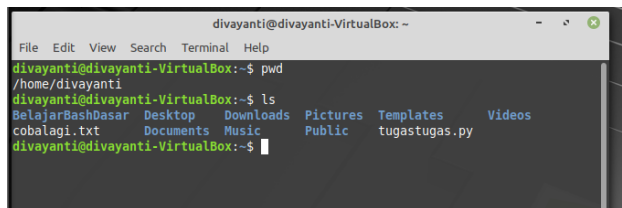
2. Setelah terminal terbuka, maka tampilannya akan seperti di bawah ini



3. ketik **pwd** (*parent working directory*) untuk dijalankan dan yang akan keluar home Linux kita

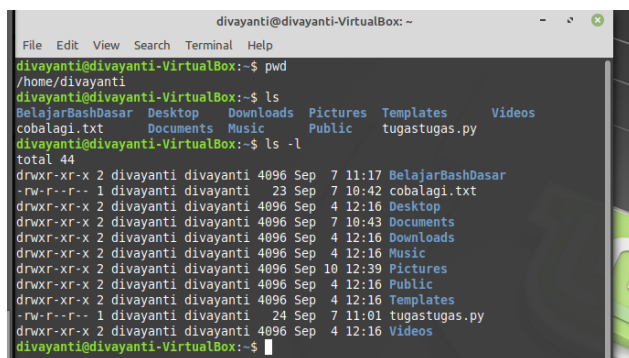


4. Untuk menampilkan isi dari direktori ketik **ls**



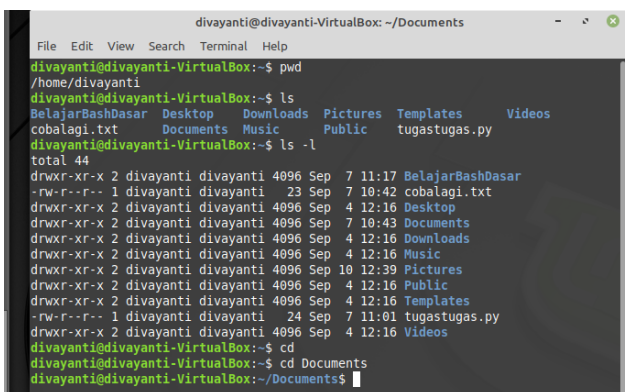
```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
divayanti@divayanti-VirtualBox:~$ pwd  
/home/divayanti  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Desktop Downloads Pictures Templates Videos  
cobalagi.txt Documents Music Public tugastugas.py  
divayanti@divayanti-VirtualBox:~$
```

5. Untuk menampilkan hak akses beserta waktu terakhir dari sebuah direktori dengan mengetik **ls -l**



```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
divayanti@divayanti-VirtualBox:~$ pwd  
/home/divayanti  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Desktop Downloads Pictures Templates Videos  
cobalagi.txt Documents Music Public tugastugas.py  
divayanti@divayanti-VirtualBox:~$ ls -l  
total 44  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 11:17 BelajarBashDasar  
-rw-r--r-- 1 divayanti divayanti  23 Sep  7 10:42 cobalagi.txt  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Desktop  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 10:43 Documents  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Downloads  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Music  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 10 12:39 Pictures  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Public  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Templates  
-rw-r--r-- 1 divayanti divayanti  24 Sep  7 11:01 tugastugas.py  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Videos  
divayanti@divayanti-VirtualBox:~$
```

6. ketik **cd** (*change directory*) untuk masuk ke dalam direktori yang kita inginkan dan berpindah dari direktori satu ke direktori lainnya



```
divayanti@divayanti-VirtualBox: ~/Documents  
File Edit View Search Terminal Help  
divayanti@divayanti-VirtualBox:~$ pwd  
/home/divayanti  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Desktop Downloads Pictures Templates Videos  
cobalagi.txt Documents Music Public tugastugas.py  
divayanti@divayanti-VirtualBox:~$ ls -l  
total 44  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 11:17 BelajarBashDasar  
-rw-r--r-- 1 divayanti divayanti  23 Sep  7 10:42 cobalagi.txt  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Desktop  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 10:43 Documents  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Downloads  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Music  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 10 12:39 Pictures  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Public  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Templates  
-rw-r--r-- 1 divayanti divayanti  24 Sep  7 11:01 tugastugas.py  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Videos  
divayanti@divayanti-VirtualBox:~$ cd  
divayanti@divayanti-VirtualBox:~$ cd Documents  
divayanti@divayanti-VirtualBox:~/Documents$
```

7. Setelah masuk ke dalam direktori untuk menampilkan apa yang ada dalam direktori ketik **ls**

```
divayanti@divayanti-VirtualBox: ~/Documents
File Edit View Search Terminal Help
divayanti@divayanti-VirtualBox:~$ pwd
/home/divayanti
divayanti@divayanti-VirtualBox:~$ ls
BelajarBashDasar Desktop Downloads Pictures Templates Videos
cobalagi.txt Documents Music Public tugastugas.py
divayanti@divayanti-VirtualBox:~$ ls -l
total 44
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 11:17 BelajarBashDasar
-rw-r--r-- 1 divayanti divayanti  23 Sep  7 10:42 cobalagi.txt
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Desktop
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 10:43 Documents
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Downloads
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Music
drwxr-xr-x 2 divayanti divayanti 4096 Sep 10 12:39 Pictures
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Public
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Templates
-rw-r--r-- 1 divayanti divayanti  24 Sep  7 11:01 tugastugas.py
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Videos
divayanti@divayanti-VirtualBox:~$ cd
divayanti@divayanti-VirtualBox:~$ cd Documents
divayanti@divayanti-VirtualBox:~/Documents$ ls
cobalagi.txt trialagi.py
divayanti@divayanti-VirtualBox:~/Documents$
```

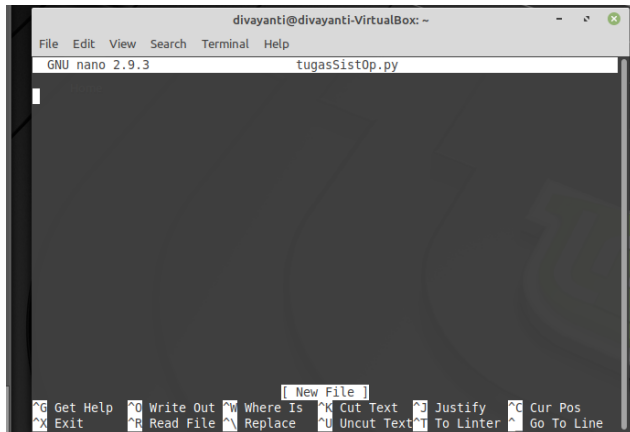
8. untuk keluar dari direktori tersebut bisa menggunakan

```
divayanti@divayanti-VirtualBox: ~
File Edit View Search Terminal Help
divayanti@divayanti-VirtualBox:~$ pwd
/home/divayanti
divayanti@divayanti-VirtualBox:~$ ls
BelajarBashDasar Desktop Downloads Pictures Templates Videos
cobalagi.txt Documents Music Public tugastugas.py
divayanti@divayanti-VirtualBox:~$ ls -l
total 44
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 11:17 BelajarBashDasar
-rw-r--r-- 1 divayanti divayanti  23 Sep  7 10:42 cobalagi.txt
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Desktop
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 10:43 Documents
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Downloads
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Music
drwxr-xr-x 2 divayanti divayanti 4096 Sep 10 12:39 Pictures
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Public
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Templates
-rw-r--r-- 1 divayanti divayanti  24 Sep  7 11:01 tugastugas.py
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Videos
divayanti@divayanti-VirtualBox:~$ cd
divayanti@divayanti-VirtualBox:~$ cd Documents
divayanti@divayanti-VirtualBox:~/Documents$ ls
cobalagi.txt trialagi.py
divayanti@divayanti-VirtualBox:~/Documents$ cd
divayanti@divayanti-VirtualBox:~$
```

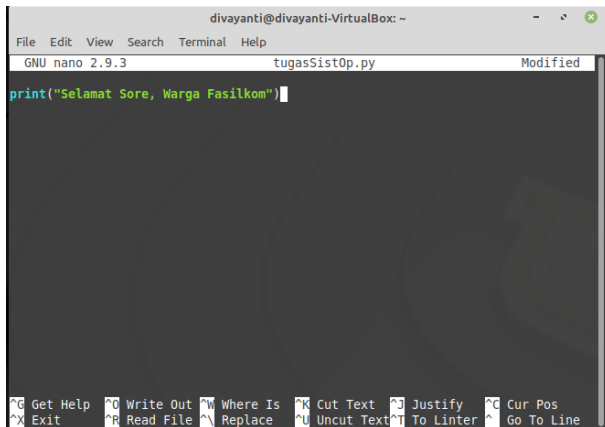
9. Untuk membuat file / teks editor dengan firut yang sangat terbatas ketik **nano filename.py**

```
divayanti@divayanti-VirtualBox: ~
File Edit View Search Terminal Help
BelajarBashDasar Desktop Downloads Pictures Templates Videos
cobalagi.txt Documents Music Public tugastugas.py
divayanti@divayanti-VirtualBox:~$ ls -l
total 44
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 11:17 BelajarBashDasar
-rw-r--r-- 1 divayanti divayanti  23 Sep  7 10:42 cobalagi.txt
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Desktop
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 10:43 Documents
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Downloads
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Music
drwxr-xr-x 2 divayanti divayanti 4096 Sep 10 12:39 Pictures
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Public
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Templates
-rw-r--r-- 1 divayanti divayanti  24 Sep  7 11:01 tugastugas.py
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Videos
divayanti@divayanti-VirtualBox:~$ cd
divayanti@divayanti-VirtualBox:~$ cd Documents
divayanti@divayanti-VirtualBox:~/Documents$ ls
cobalagi.txt trialagi.py
divayanti@divayanti-VirtualBox:~/Documents$ cd
divayanti@divayanti-VirtualBox:~/Documents$ cat tugastugas.py
print("Semangat Diva")
divayanti@divayanti-VirtualBox:~/Documents$ nano tugasSistOp.py
```

10. Setelah masuk kedalam **GBU nano** kita bisa membuat script yang kita inginkan

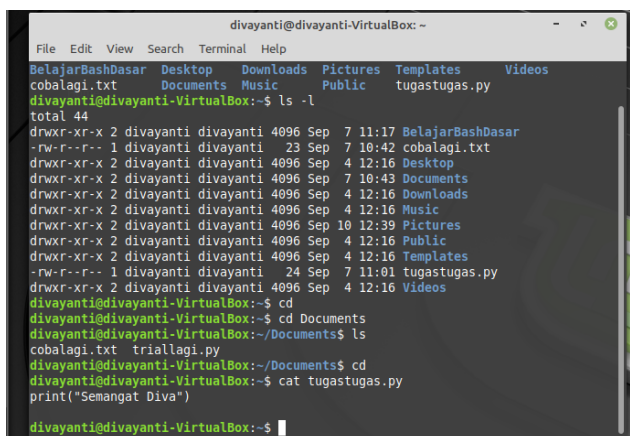


```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
GNU nano 2.9.3 tugasSistOp.py  
  
[ New File ]  
^G Get Help ^O Write Out ^W Where Is ^X Cut Text ^J Justify ^C Cur Pos  
^X Exit ^R Read File ^_ Replace ^U Uncut Text ^L To Linter ^_ Go To Line
```



```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
GNU nano 2.9.3 tugasSistOp.py Modified  
print("Selamat Sore, Warga Fasilkom")  
  
^G Get Help ^O Write Out ^W Where Is ^X Cut Text ^J Justify ^C Cur Pos  
^X Exit ^R Read File ^_ Replace ^U Uncut Text ^L To Linter ^_ Go To Line
```

11. Untuk melihat isi dari suatu teks editor yang telah kita dengan mengetik **cat filename.py**



```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
BelajarBashDasar Desktop Downloads Pictures Templates Videos  
cobalagi.txt Documents Music Public tugastugas.py  
divayanti@divayanti-VirtualBox:~$ ls -l  
total 44  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 11:17 BelajarBashDasar  
-rw-r--r-- 1 divayanti divayanti  23 Sep  7 10:42 cobalagi.txt  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Desktop  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  7 10:43 Documents  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Downloads  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Music  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 10 12:39 Pictures  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Public  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Templates  
-rw-r--r-- 1 divayanti divayanti  24 Sep  7 11:01 tugastugas.py  
drwxr-xr-x 2 divayanti divayanti 4096 Sep  4 12:16 Videos  
divayanti@divayanti-VirtualBox:~$ cd  
divayanti@divayanti-VirtualBox:~$ cd Documents  
divayanti@divayanti-VirtualBox:~/Documents$ ls  
cobalagi.txt trialagi.py  
divayanti@divayanti-VirtualBox:~/Documents$ cd  
divayanti@divayanti-VirtualBox:~$ cat tugastugas.py  
print("Semangat Diva")  
divayanti@divayanti-VirtualBox:~$
```

12. ketik **mkdir (nama direktorinya)** untuk membuat direktori baru, jika sudah bisa dicek kembali dengan mengetik **ls** dan cek apakah direktori tersebut sudah ada atau belum

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
divayanti@divayanti-VirtualBox:~$ ls -l  
total 44  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 7 11:17 BelajarBashDasar  
-rw-r--r-- 1 divayanti divayanti 23 Sep 7 10:42 cobalagi.txt  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Desktop  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 7 10:43 Documents  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Downloads  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Music  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 10 12:39 Pictures  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Public  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Templates  
-rw-r--r-- 1 divayanti divayanti 24 Sep 7 11:01 tugastugas.py  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Videos  
divayanti@divayanti-VirtualBox:~$ cd  
divayanti@divayanti-VirtualBox:~$ cd Documents  
divayanti@divayanti-VirtualBox:~/Documents$ ls  
cobalagi.txt trialagi.py  
divayanti@divayanti-VirtualBox:~/Documents$ cd  
divayanti@divayanti-VirtualBox:~$ cat tugastugas.py  
print("Semangat Diva")  
  
divayanti@divayanti-VirtualBox:~$ nano tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ nano tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ mkdir Linux
```

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 7 10:43 Documents  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Downloads  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Music  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 10 12:39 Pictures  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Public  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Templates  
-rw-r--r-- 1 divayanti divayanti 24 Sep 7 11:01 tugastugas.py  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Videos  
divayanti@divayanti-VirtualBox:~$ cd  
divayanti@divayanti-VirtualBox:~$ cd Documents  
divayanti@divayanti-VirtualBox:~/Documents$ ls  
cobalagi.txt trialagi.py  
divayanti@divayanti-VirtualBox:~/Documents$ cd  
divayanti@divayanti-VirtualBox:~$ cat tugastugas.py  
print("Semangat Diva")  
  
divayanti@divayanti-VirtualBox:~$ nano tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ nano tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ mkdir Linux  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Templates Videos  
cobalagi.txt Downloads Pictures tugasSistOp.py  
Desktop Linux Public tugastugas.py  
divayanti@divayanti-VirtualBox:~$
```

13. Untuk menghapus file yang telah kita buat ketik **rm filename.txt** kemudian dicek kembali dengan mengetik **ls** apakah file tersebut masih ada atau tidak

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Public  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Templates  
-rw-r--r-- 1 divayanti divayanti 24 Sep 7 11:01 tugastugas.py  
drwxr-xr-x 2 divayanti divayanti 4096 Sep 4 12:16 Videos  
divayanti@divayanti-VirtualBox:~$ cd  
divayanti@divayanti-VirtualBox:~$ cd Documents  
divayanti@divayanti-VirtualBox:~/Documents$ ls  
cobalagi.txt trialagi.py  
divayanti@divayanti-VirtualBox:~/Documents$ cd  
divayanti@divayanti-VirtualBox:~$ cat tugastugas.py  
print("Semangat Diva")  
  
divayanti@divayanti-VirtualBox:~$ nano tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ nano tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ mkdir Linux  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Templates Videos  
cobalagi.txt Downloads Pictures tugasSistOp.py  
Desktop Linux Public tugastugas.py  
divayanti@divayanti-VirtualBox:~$ rm cobalagi.txt  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Linux Pictures Templates tugastugas.py  
Desktop Downloads Music Public tugasSistOp.py Videos  
divayanti@divayanti-VirtualBox:~$
```

14. Jika kita ingin menghapus sebuah direktori ketik **rmdir** **namadirektori** kemudian cek dengan **ls** apakah direktori tersebut masih ada atau tidak

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
divayanti@divayanti-VirtualBox:~$ cd  
divayanti@divayanti-VirtualBox:~$ cd Documents  
divayanti@divayanti-VirtualBox:~/Documents$ ls  
cobalagi.txt trialagi.py  
divayanti@divayanti-VirtualBox:~/Documents$ cd  
divayanti@divayanti-VirtualBox:~$ cat tugastugas.py  
print("Semangat Diva")  
  
divayanti@divayanti-VirtualBox:~$ nano tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ nano tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ mkdir Linux  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Templates Videos  
cobalagi.txt Downloads Pictures tugasSistOp.py  
Desktop Linux Public tugastugas.py  
divayanti@divayanti-VirtualBox:~$ rm cobalagi.txt  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Linux Pictures Templates tugastugas.py  
Desktop Downloads Music Public tugasSistOp.py Videos  
divayanti@divayanti-VirtualBox:~$ rmdir Linux  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public tugasSistOp.py Videos  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$
```

15. Jika dalam sebuah direktori terdapat file dan kita hendak menghapus maka ketik **rm -rf** **namadirektori**

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
cobalagi.txt Downloads Pictures tugasSistOp.py  
Desktop Linux Public tugastugas.py  
divayanti@divayanti-VirtualBox:~$ rm cobalagi.txt  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Linux Pictures Templates tugastugas.py  
Desktop Downloads Music Public tugasSistOp.py Videos  
divayanti@divayanti-VirtualBox:~$ rmdir Linux  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public tugasSistOp.py Videos  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$ mkdir Taks  
divayanti@divayanti-VirtualBox:~$ cp tugastugas.py Taks  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public Templates tugastugas.py  
Desktop Downloads Pictures Taks tugasSistOp.py Videos  
divayanti@divayanti-VirtualBox:~$ cd Taks  
divayanti@divayanti-VirtualBox:~/Taks$ ls  
tugastugas.py  
divayanti@divayanti-VirtualBox:~/Taks$ cd  
divayanti@divayanti-VirtualBox:~$ rm -rf Taks  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public tugasSistOp.py Videos  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$
```

16. Untuk memindahkan suatu file ke dalam sebuah direktori bisa ketik **mv** **namafile** **namadirektori** dan bisa dicek ulang

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
Desktop Downloads Music Public tugasSistOp.py Videos  
divayanti@divayanti-VirtualBox:~$ rmdir Linux  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public tugasSistOp.py Videos  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$ mkdir Taks  
divayanti@divayanti-VirtualBox:~$ cp tugastugas.py Taks  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public Templates tugastugas.py  
Desktop Downloads Pictures Taks tugasSistOp.py Videos  
divayanti@divayanti-VirtualBox:~$ cd Taks  
divayanti@divayanti-VirtualBox:~/Taks$ ls  
tugastugas.py  
divayanti@divayanti-VirtualBox:~/Taks$ cd  
divayanti@divayanti-VirtualBox:~$ rm -rf Taks  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public tugasSistOp.py Videos  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$ mkdir Trial  
divayanti@divayanti-VirtualBox:~$ mv tugastugas.py Trial  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public Trial tugasSistOp.py Videos  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$
```

17. Untuk menyalin suatu file dan mempaste file tersebut ke dalam direktori lainnya ketik **cp namafile namadirektori** dan bisa dicek ulang untuk memastikannya

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
tugastugas.py  
divayanti@divayanti-VirtualBox:~/Taks$ cd  
divayanti@divayanti-VirtualBox:~$ rm -rf Taks  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public tugasSistOp.py Videos  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$ mkdir Trial  
divayanti@divayanti-VirtualBox:~$ mv tugastugas.py Trial  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public Trial Videos  
Desktop Downloads Pictures Templates tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ cd Trial  
divayanti@divayanti-VirtualBox:~/Trial$ ls  
tugastugas.py  
divayanti@divayanti-VirtualBox:~/Trial$ cd  
divayanti@divayanti-VirtualBox:~/Trial$ cp tugasSistOp.py Trial  
divayanti@divayanti-VirtualBox:~/Trial$ ls  
BelajarBashDasar Documents Music Public Trial Videos  
Desktop Downloads Pictures Templates tugasSistOp.py  
divayanti@divayanti-VirtualBox:~/Trial$ cd Trial  
divayanti@divayanti-VirtualBox:~/Trial/Trial$ ls  
tugasSistOp.py tugastugas.py  
divayanti@divayanti-VirtualBox:~/Trial/Trial$ cd  
divayanti@divayanti-VirtualBox:~/Trial/Trial$
```

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$ mkdir Taks  
divayanti@divayanti-VirtualBox:~$ cp tugastugas.py Taks  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public Templates tugastugas.py  
Desktop Downloads Pictures Taks tugasSistOp.py Videos  
divayanti@divayanti-VirtualBox:~$ cd Taks  
divayanti@divayanti-VirtualBox:~/Taks$ ls  
tugastugas.py  
divayanti@divayanti-VirtualBox:~/Taks$ cd  
divayanti@divayanti-VirtualBox:~/Taks$ rm -rf Taks  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public tugasSistOp.py Videos  
Desktop Downloads Pictures Templates tugastugas.py  
divayanti@divayanti-VirtualBox:~$ mkdir Trial  
divayanti@divayanti-VirtualBox:~$ mv tugastugas.py Trial  
divayanti@divayanti-VirtualBox:~$ ls  
BelajarBashDasar Documents Music Public Trial Videos  
Desktop Downloads Pictures Templates tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ cd Trial  
divayanti@divayanti-VirtualBox:~/Trial$ ls  
tugastugas.py  
divayanti@divayanti-VirtualBox:~/Trial$ cd  
divayanti@divayanti-VirtualBox:~/Trial$
```

18. Ketik **df (disk free)** untuk melihat ruangan tersisa dari partisi yang ter-mount

```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
BelajarBashDasar Documents Music Public Trial Videos  
Desktop Downloads Pictures Templates tugasSistOp.py  
divayanti@divayanti-VirtualBox:~$ cd Trial  
divayanti@divayanti-VirtualBox:~/Trial$ ls  
tugastugas.py  
divayanti@divayanti-VirtualBox:~/Trial$ cd  
divayanti@divayanti-VirtualBox:~/Trial$ cp tugasSistOp.py Trial  
divayanti@divayanti-VirtualBox:~/Trial$ ls  
BelajarBashDasar Documents Music Public Trial Videos  
Desktop Downloads Pictures Templates tugasSistOp.py  
divayanti@divayanti-VirtualBox:~/Trial$ cd Trial  
divayanti@divayanti-VirtualBox:~/Trial/Trial$ ls  
tugasSistOp.py tugastugas.py  
divayanti@divayanti-VirtualBox:~/Trial/Trial$ cd  
divayanti@divayanti-VirtualBox:~/Trial/Trial$ df  
divayanti@divayanti-VirtualBox:~/Trial/Trial$
```

Filesystem	1K-blocks	Used	Available	Use%	Mounted on
udev	912792	0	912792	0%	/dev
tmpfs	187984	1032	186952	1%	/run
/dev/sda1	26509264	6879488	12564920	36%	/
tmpfs	939912	0	939912	0%	/dev/shm
tmpfs	5120	4	5116	1%	/run/lock
tmpfs	939912	0	939912	0%	/sys/fs/cgroup
tmpfs	187980	20	187960	1%	/run/user/1000

19. Ketik **top** untuk menunjukkan informasi mengenai proses – proses dan *threads* yang sedang dijalankan oleh kernel linux

```
divayanti@divayanti-VirtualBox: ~
File Edit View Search Terminal Help
BelajarBashDasar Documents Music Public Trial Videos
Desktop Downloads Pictures Templates tugasSistOp.py
divayanti@divayanti-VirtualBox:~$ cd Trial
divayanti@divayanti-VirtualBox:~/Trial$ ls
tugasSistOp.py
divayanti@divayanti-VirtualBox:~/Trial$ cd
divayanti@divayanti-VirtualBox:~$ cp tugasSistOp.py Trial
divayanti@divayanti-VirtualBox:~$ ls
BelajarBashDasar Documents Music Public Trial Videos
Desktop Downloads Pictures Templates tugasSistOp.py
divayanti@divayanti-VirtualBox:~$ cd Trial
divayanti@divayanti-VirtualBox:~/Trial$ ls
tugasSistOp.py tugasSistOp.py
divayanti@divayanti-VirtualBox:~/Trial$ cd
divayanti@divayanti-VirtualBox:~$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
udev            912792         0   912792    0% /dev
tmpfs           187984       1032   186952    1% /run
/dev/sdal       20509264 6879488 12564920 36% /
tmpfs           939912         0   939912    0% /dev/shm
tmpfs           5120          4     5116    1% /run/lock
tmpfs           939912         0   939912    0% /sys/fs/cgroup
tmpfs          187980         20   187960    1% /run/user/1000
divayanti@divayanti-VirtualBox:~$ top
```

```
divayanti@divayanti-VirtualBox: ~
File Edit View Search Terminal Help
top - 13:29:30 up 55 min, 1 user, load average: 0,21, 0,11, 0,09
Tasks: 148 total, 1 running, 112 sleeping, 0 stopped, 0 zombie
%Cpu(s): 1,2 us, 0,2 sy, 0,0 ni, 98,7 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st
KiB Mem : 1879824 total, 973616 free, 356996 used, 549212 buff/cache
KiB Swap: 969960 total, 969960 free, 0 used, 1285164 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR   S  %CPU  %MEM    TIME+  COMMAND
1305 divayan+ 20   0   782696 148428 92420 S   2,3   7,9   4:11.38 cinnamon
1933 divayan+ 20   0   8120    3636  3128 R   0,3   0,2   0:00.43 top
1809 divayan+ 20   0   97012 30600 24468 S   0,3   1,6   0:04.43 gnome-term+
  1 root      20   0   30444    7716  6104 S   0,0   0,4   0:04.38 systemd
  2 root      20   0         0         0   0 S   0,0   0,0   0:00.04 kthreadd
  4 root      20   0         0         0   0 I   0,0   0,0   0:00.00 kworker/0:
  6 root      20   0         0         0   0 I   0,0   0,0   0:00.00 mm_percpu
  7 root      20   0         0         0   0 S   0,0   0,0   0:00.06 ksoftirqd/0
  8 root      20   0         0         0   0 I   0,0   0,0   0:00.23 rcu_sched
  9 root      20   0         0         0   0 I   0,0   0,0   0:00.00 rcu_bh
 10 root      rt    0         0         0   0 S   0,0   0,0   0:00.00 migration/0
 11 root      rt    0         0         0   0 S   0,0   0,0   0:00.01 watchdog/0
 12 root      20   0         0         0   0 S   0,0   0,0   0:00.00 cpuhp/0
 13 root      20   0         0         0   0 S   0,0   0,0   0:00.00 cpuhp/1
 14 root      rt    0         0         0   0 S   0,0   0,0   0:00.02 watchdog/1
 15 root      rt    0         0         0   0 S   0,0   0,0   0:00.00 migration/1
 16 root      20   0         0         0   0 S   0,0   0,0   0:00.06 ksoftirqd/1
```

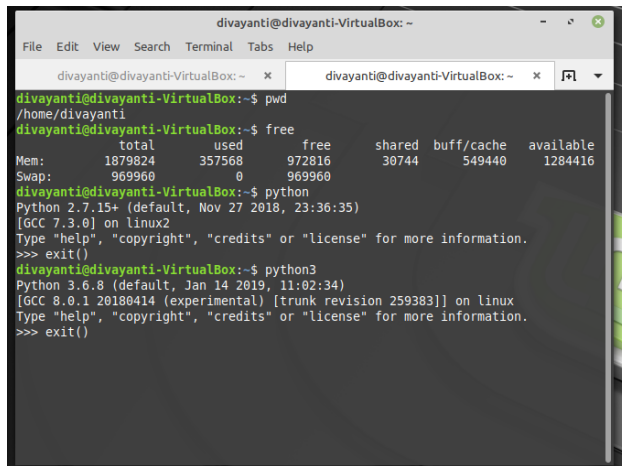
20. Karena **top** tidak berhenti, kita perlu untuk membuat tab baru pada termnal

```
divayanti@divayanti-VirtualBox: ~
File Edit View Search Terminal Help
New Tab user, load average: 0,11, 0,09, 0,09
New Window g, 112 sleeping, 0 stopped, 0 zombie
Close Tab 0,0 ni, 98,3 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st
Close Window 973708 free, 356648 used, 549468 buff/cache
Shift+Ctrl+W 969960 free, 0 used, 1285272 avail Mem
Shift+Ctrl+Q

  PID USER      PR  NI    VIRT    RES    SHR   S  %CPU  %MEM    TIME+  COMMAND
1305 divayan+ 20   0   782936 148280 92660 S   3,0   7,9   4:13.37 cinnamon
39 root      20   0         0         0   0 I   0,3   0,0   0:00.23 kworker/1:1
710 root      20   0 218932 77216 53796 S   0,3   4,1   0:14.11 Xorg
1809 divayan+ 20   0   97012 30600 24468 S   0,3   1,6   0:04.60 gnome-term+
1933 divayan+ 20   0   8120    3636  3128 R   0,3   0,2   0:00.63 top
  1 root      20   0   30444    7716  6104 S   0,0   0,4   0:04.38 systemd
  2 root      20   0         0         0   0 S   0,0   0,0   0:00.04 kthreadd
  4 root      20   0         0         0   0 I   0,0   0,0   0:00.00 kworker/0:
  6 root      20   0         0         0   0 I   0,0   0,0   0:00.00 mm_percpu
  7 root      20   0         0         0   0 S   0,0   0,0   0:00.06 ksoftirqd/0
  8 root      20   0         0         0   0 I   0,0   0,0   0:00.23 rcu_sched
  9 root      20   0         0         0   0 I   0,0   0,0   0:00.00 rcu_bh
 10 root      rt    0         0         0   0 S   0,0   0,0   0:00.00 migration/0
 11 root      rt    0         0         0   0 S   0,0   0,0   0:00.01 watchdog/0
 12 root      20   0         0         0   0 S   0,0   0,0   0:00.00 cpuhp/0
 13 root      20   0         0         0   0 S   0,0   0,0   0:00.00 cpuhp/1
 14 root      rt    0         0         0   0 S   0,0   0,0   0:00.02 watchdog/1
```


21. Untuk mengetahui sumber daya RAM yang terpakai atau tidak ketik **free**

22. Untuk menjalankan *Python Interpreter* bisa ketik **python** dan **python3**

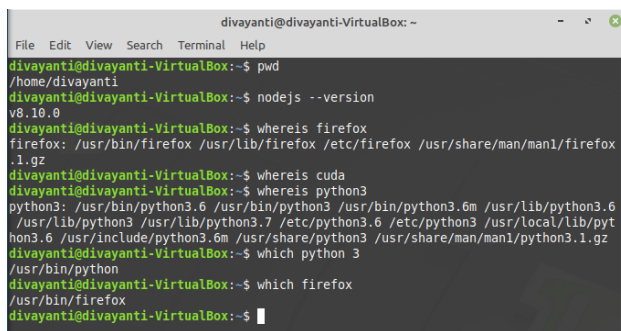


```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Tabs Help  
divayanti@divayanti-VirtualBox: ~ x divayanti@divayanti-VirtualBox: ~ x  
divayanti@divayanti-VirtualBox:~$ pwd  
/home/divayanti  
divayanti@divayanti-VirtualBox:~$ free  
Mem:          total        used        free      shared  buff/cache   available  
Swap:          969960           0        969960  
divayanti@divayanti-VirtualBox:~$ python  
Python 2.7.15+ (default, Nov 27 2018, 23:36:35)  
[GCC 7.3.0] on linux2  
Type "help", "copyright", "credits" or "license" for more information.  
>>> exit()  
divayanti@divayanti-VirtualBox:~$ python3  
Python 3.6.8 (default, Jan 14 2019, 11:02:34)  
[GCC 8.0.1 20180414 (experimental) [trunk revision 259383]] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> exit()
```

23. Untuk mengetahui sebuah versi dari suatu perangkat lunak ketik **nodejs --version** ataupun **code --version**

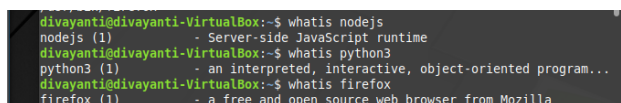
24. Untuk mengetahui direktori di mana berkas – berkas perangkat lunak tersebut di simpan ketik **whereis firefox** ataupun **whereis cuda**

25. Untuk mendapatkan direktori utama yang menyimpan berkas – berkas suatu perangkat lunak ketik **which python3** dan **which firefox**



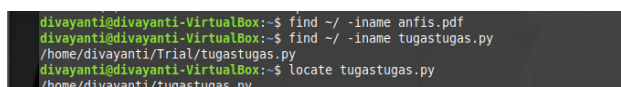
```
divayanti@divayanti-VirtualBox: ~  
File Edit View Search Terminal Help  
divayanti@divayanti-VirtualBox:~$ pwd  
/home/divayanti  
divayanti@divayanti-VirtualBox:~$ nodejs --version  
v8.10.0  
divayanti@divayanti-VirtualBox:~$ whereis firefox  
firefox: /usr/bin/firefox /usr/lib/firefox /etc/firefox /usr/share/man/man1/firefox  
.1.gz  
divayanti@divayanti-VirtualBox:~$ whereis cuda  
divayanti@divayanti-VirtualBox:~$ whereis python3  
python3: /usr/bin/python3.6 /usr/bin/python3 /usr/bin/python3.6m /usr/lib/python3.6  
/usr/lib/python3 /usr/lib/python3.7 /etc/python3.6 /etc/python3 /usr/local/lib/pyt  
hon3.6 /usr/include/python3.6m /usr/share/python3 /usr/share/man/man1/python3.1.gz  
divayanti@divayanti-VirtualBox:~$ which python 3  
/usr/bin/python  
divayanti@divayanti-VirtualBox:~$ which firefox  
/usr/bin/firefox  
divayanti@divayanti-VirtualBox:~$
```

26. Untuk mendapatkan definisi dari sebuah perangkat lunak ketik **whatis nodejs**, **whatis python3**, dan **whatis firefox**



```
divayanti@divayanti-VirtualBox:~$ whatis nodejs  
nodejs (1)      - Server-side JavaScript runtime  
divayanti@divayanti-VirtualBox:~$ whatis python3  
python3 (1)    - an interpreted, interactive, object-oriented program..  
divayanti@divayanti-VirtualBox:~$ whatis firefox  
firefox (1)    - a free and open source web browser from Mozilla
```

27. Untuk mencari berkas kita bisa menggunakan **locate** dan **find**. **locate** lebih cepat **find** dengan karena **locate** mencari pada *prebuilt database* sedangkan **find** mencari berkas secara keseluruhan.



```
divayanti@divayanti-VirtualBox:~$ find ~/ -iname anfis.pdf  
divayanti@divayanti-VirtualBox:~$ find ~/ -iname tugastugas.py  
/home/divayanti/Trial/tugastugas.py  
divayanti@divayanti-VirtualBox:~$ locate tugastugas.py  
/home/divayanti/tugastugas.py
```

28. Untuk mengecek koneksi internet dengan sebuah alamat IP, website, dan sebagainya ketik **ping**.

```
divayanti@divayanti-VirtualBox:~$ ping google.com
PING google.com (142.251.10.100) 56(84) bytes of data:
64 bytes from sd-in-f100.1e100.net (142.251.10.100): icmp_seq=1 ttl=104 time=5
7.8 ms
64 bytes from sd-in-f100.1e100.net (142.251.10.100): icmp_seq=2 ttl=104 time=4
1.7 ms
64 bytes from sd-in-f100.1e100.net (142.251.10.100): icmp_seq=3 ttl=104 time=5
3.5 ms
64 bytes from sd-in-f100.1e100.net (142.251.10.100): icmp_seq=4 ttl=104 time=3
2.9 ms
64 bytes from sd-in-f100.1e100.net (142.251.10.100): icmp_seq=5 ttl=104 time=3
1.0 ms
64 bytes from sd-in-f100.1e100.net (142.251.10.100): icmp_seq=6 ttl=104 time=3
4.1 ms
```

Catatan :

poweroff, untuk shutdown sistem operasi.

reboot, untuk me-restart sistem operasi.

systemctl suspend, untuk masuk ke dalam mode sleep.

```
divayanti@divayanti-VirtualBox:~$ pwd
/home/divayanti
divayanti@divayanti-VirtualBox:~$ sudo apt update
[sudo] password for divayanti:
Hit:1 http://archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Get:3 http://archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:4 http://archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:5 http://security.ubuntu.com/ubuntu bionic-security/main i386 Packages [1.23
3 kB]
Get:6 http://archive.ubuntu.com/ubuntu bionic-updates/main i386 Packages [1.533
kB]
Ign:7 http://packages.linuxmint.com tina InRelease
Get:8 http://packages.linuxmint.com tina Release [24.1 kB]
Hit:9 http://archive.canonical.com/ubuntu bionic InRelease
Get:10 http://packages.linuxmint.com tina Release.gpg [833 B]
Get:11 http://security.ubuntu.com/ubuntu bionic-security/main Translation-en [41
4 kB]
Get:12 http://packages.linuxmint.com tina/upstream i386 Packages [36.7 kB]
Get:13 http://archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [503
kB]
Get:14 http://security.ubuntu.com/ubuntu bionic-security/main i386 DEP-11 Metada
ta [55.2 kB]
Get:15 http://security.ubuntu.com/ubuntu bionic-security/restricted Translation-
```

```
divayanti@divayanti-VirtualBox:~$ sudo apt upgrade
Building dependency tree
Reading state information... Done
604 packages can be upgraded. Run 'apt list --upgradable' to see them.
divayanti@divayanti-VirtualBox:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
Calculating upgrade... Done
The following NEW packages will be installed:
  distro-info finelrd fwupd-signed libblvm10 libnetplan0 libxmlb1
  python3-click python3-colorama
The following packages will be upgraded:
  accountsservice apt apt-utils aptdaemon aptdaemon-data apturl apturl-common
  aspell avahi-autoipd avahi-daemon avahi-utils base-files bash bind9-host
  binutils binutils-common binutils-i686-linux-gnu bluetooth bluez bluez-cups
  bluez-obexd bsdtar busybox-initramfs busybox-static bzip2 ca-certificates
  caribou casper cifs-utils cinnamon cinnamon-common cinnamon-dbg
  command-not-found command-not-found-data cpio cpp-7 cron cryptsetup
  cryptsetup-bin cups cups-bsd cups-client cups-common cups-core-drivers
  cups-daemon cups-ipp-utils cups-ppdc cups-server-common curl dbus
  dbus-user-session dbus-x11 dirmngr distro-info-data dkms dmeventd dmidecode
  dmsetup dnsmasq-base dnsmasq-dpkg dpkg dpkg-dev e2fslibs e2fsprogs
  evolution-data-server evolution-data-server-common fdisk file file-roller
  firefox firefox-locale-en flatpak fonts-noto-cjk fonts-opensymbol
```

Soal Latihan

1. .py

```
divayanti@divayanti-VirtualBox:~$ ls
BelajarBashDasar  Documents  Music      Public      Templates  tugasSistOp.py
Desktop           Downloads  Pictures    SoalLatihan.sh  Trial        Videos
divayanti@divayanti-VirtualBox:~$ cd BelajarBashDasar
divayanti@divayanti-VirtualBox:~/BelajarBashDasar$ ls
Tugas01Sisop.py
divayanti@divayanti-VirtualBox:~/BelajarBashDasar$ nano Tugas02Sisop.sh
divayanti@divayanti-VirtualBox:~/BelajarBashDasar$ python3 Tugas01Sisop.py
-----
Tugas-1 SISOP Kelas-B
-----
Nama : Divayanti Febri Sakina
NPM  :21083010099
-----
notes:
-----
Halo dunia!
Ini adalah skrip Bash pertamaku di Linux
divayanti@divayanti-VirtualBox:~/BelajarBashDasar$
```

2. .sh

```
divayanti@divayanti-VirtualBox:~/BelajarBashDasar$ bash Tugas02Sisop.sh
Halo dunia!
Ini adalah skrip Bash pertamaku di Linux!
divayanti@divayanti-VirtualBox:~/BelajarBashDasar$
```