

**LAPORAN SISTEM OPERASI**  
**PEMROGRAMAN BASH SHELL PADA SYSTEM OPERASI LINUX**

“Disusun dalam rangka memenuhi salah satu tugas pada mata kuliah Sistem Operasi Oleh  
Dosen Candrasena Setiadi, ST., M.MT”



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**2023**

\$ Lakukan perintah berikut: \$

who

whoami

```
(jag@LAPTOP-CEEMFUHE)~$ who
(jag@LAPTOP-CEEMFUHE)~$ whoami
jag
```

Ls

```
(jag@LAPTOP-CEEMFUHE)~$ ls
```

mkdir testing

sudo su

mkdir testing

cd testing

```
(jag@LAPTOP-CEEMFUHE)~$ mkdir testing
(jag@LAPTOP-CEEMFUHE)~$ sudo su
[sudo] password for jag:
(root@LAPTOP-CEEMFUHE)~/home/jag# mkdir testing
mkdir: cannot create directory 'testing': File exists
(root@LAPTOP-CEEMFUHE)~/home/jag# cd testing
```

touch index.js

ls

```
(root@LAPTOP-CEEMFUHE)~/home/jag/testing
# touch index.js

(root@LAPTOP-CEEMFUHE)~/home/jag/testing
# ls
index.js
```

cd ..

ls

```
(root@LAPTOP-CEEMFUHE)~/home/jag/testing
# cd ..

(root@LAPTOP-CEEMFUHE)~/home/jag
# ls
testing
```

clear

rm -rf testing\*

```
(root@LAPTOP-CEEMFUHE)~/home/jag
# rm -rf testing

(root@LAPTOP-CEEMFUHE)~/home/jag
# |
```

\$ Langkah pemrograman shell: \$

nano uji.sh

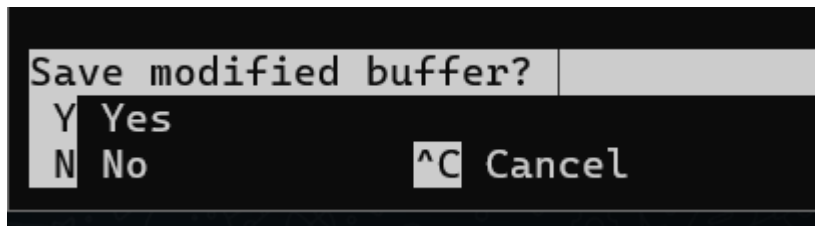
#!/bin/bash

echo "saya super admin"

```
#!/bin/bash
echo "saya super admin"
```

^X

Y



Ls

```
(root@LAPTOP-CEEMFUHE)~/home/jag
# ls
uji.sh
```

ls -l uji.sh

```
(root@LAPTOP-CEEMFUHE)~/home/jag
# ls -l uji.sh
-rw-r--r-- 1 root root 35 May 16 11:02 uji.sh
```

chmod +x uji.sh

./uji.sh

```
(root@LAPTOP-CEEMFUHE)~/home/jag
# chmod +x uji.sh

(root@LAPTOP-CEEMFUHE)~/home/jag
# ./uji.sh
./uji.sh: line 2: echosaya super admin: command not found
```

\$ File sederhana \$

nano uji2.sh

#!/bin/bash

#Program shell

#

var1=y

echo \$var1

```
#!/bin/bash
#Program shell
#
var1=y
echo $var1
```

^x

Y

```
Save modified buffer?
Y Yes
N No      ^C Cancel
```

chmod +x uji2.sh

./uji2.sh

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# chmod +x uji2.sh

(root@LAPTOP-CEEMFUHE)-[/home/jag]
# ./uji2.sh
y
```

\$ shell interaktif 1 \$

vpt=var1=Y

echo \$vpt

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# vpt=var1=Y

(root@LAPTOP-CEEMFUHE)-[/home/jag]
# echo $vpt
var1=Y
```

\$ shell interaktif 2 \$

v1=2

v2='+'

v3=5

v4='=

v5=7

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# v1=2

(root@LAPTOP-CEEMFUHE)-[/home/jag]
# v2='+'

(root@LAPTOP-CEEMFUHE)-[/home/jag]
# v3=5

(root@LAPTOP-CEEMFUHE)-[/home/jag]
# v4='='

(root@LAPTOP-CEEMFUHE)-[/home/jag]
# v5=7
```

v6=\$v1\$v2\$v3\$v4\$v5

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# v6=$v1$v2$v3$v4$v5
```

echo v6

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# echo $v6
2+5=7
```

\$ Read string \$

read jenis

pria

echo \$jenis

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# read jenis
pria

(root@LAPTOP-CEEMFUHE)-[/home/jag]
# echo $jenis
pria
```

\$ penjumlahan aritmatik \$

nano aritmatik.sh

#!/bin/bash

a=17

b=3

let result=\$a+\$b;

echo "\$result"

```
#!/bin/bash
a=17
b=3
let result=$a+$b;
echo "$result"
```

^X

Y

```
Save modified buffer?
Y Yes
N No      ^C Cancel
```

chmod +x aritmatik.sh

./aritmatik.sh

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# chmod +x aritmatik.sh

(root@LAPTOP-CEEMFUHE)-[/home/jag]
# ./aritmatik.sh
"20"
```

\$ .js \$

nano code.js

const data = "saya super admin"

console.log(data);

```
const data = "saya super admin"
console.log(data);
```

^X

Y

```
Save modified buffer?
Y Yes
N No      ^C Cancel
```

cat code.js

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# cat code.js
const data = "saya super admin"
console.log(data);
```

node code.js

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# node code.js
Could not find command-not-found database. Run 'sudo apt update' to populate
it.
node: command not found
```

\$ Install \$

apt install nodejs



```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# apt install nodejs
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package nodejs
```

apt update

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# apt update
Get:1 http://mirror.primelink.net.id/kali kali-rolling InRelease [41.5 kB]
Get:2 http://mirror.primelink.net.id/kali kali-rolling/main amd64 Packages [19.1 MB]
Get:3 http://mirror.primelink.net.id/kali kali-rolling/main amd64 Contents (deb) [44.4 MB]
Get:4 http://mirror.primelink.net.id/kali kali-rolling/contrib amd64 Packages [101 kB]
Get:5 http://mirror.primelink.net.id/kali kali-rolling/contrib amd64 Contents (deb) [219 kB]
Get:6 http://mirror.primelink.net.id/kali kali-rolling/non-free amd64 Packages [192 kB]
Get:7 http://mirror.primelink.net.id/kali kali-rolling/non-free amd64 Contents (deb) [863 kB]
Get:8 http://mirror.primelink.net.id/kali kali-rolling/non-free-firmware amd64 Packages [33.0 kB]
Get:9 http://mirror.primelink.net.id/kali kali-rolling/non-free-firmware amd64 Contents (deb) [16.9 kB]
Fetched 64.9 MB in 26s (2,505 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
76 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

apt upgrade

node code.js

```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# node code.js
saya super admin
```

\$ World wide web and get http https (wget) \$

wget

[https://drive.google.com/file/d/1kQwK1fjfbBkC4WQKhOmv4IiJ3b22i3D\\_/view?usp=drive\\_link](https://drive.google.com/file/d/1kQwK1fjfbBkC4WQKhOmv4IiJ3b22i3D_/view?usp=drive_link)

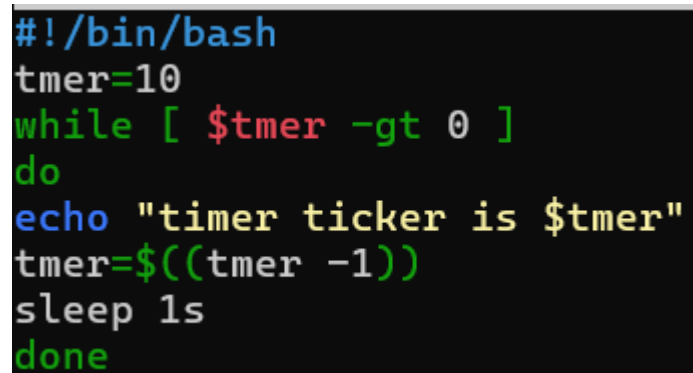
```
(root@LAPTOP-CEEMFUHE)-[/home/jag]
# wget https://drive.google.com/file/d/1kQwK1fjfbBkC4WQKhOmv4IiJ3b22i3D_/view?usp=drive_link
--2024-05-16 12:41:22-- https://drive.google.com/file/d/1kQwK1fjfbBkC4WQKhOmv4IiJ3b22i3D_/view?usp=drive_link
Resolving drive.google.com (drive.google.com)... 74.125.200.102, 74.125.200.139, 74.125.200.138, ...
Connecting to drive.google.com (drive.google.com)|74.125.200.102|:443... connected.
HTTP request sent, awaiting response... 401 Unauthorized
```

http://192.168.73.195/File-SisOp.zip

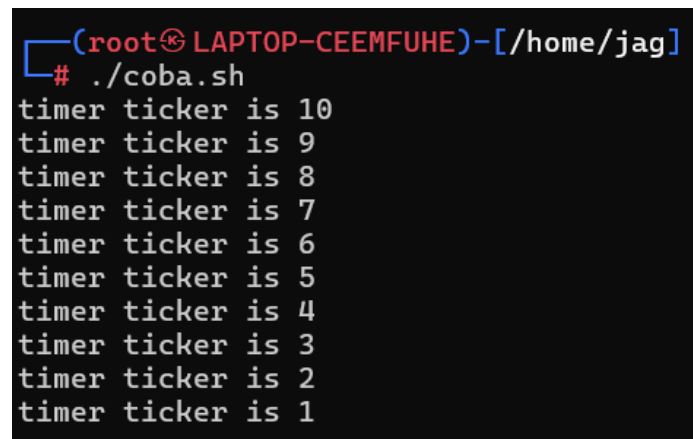
sudo apt install wget

\$ Condition shell pada linux \$

```
#!/bin/bash
tmer=10
while [ $tmer -gt 0 ]
do
echo "... $tmer"
tmer=$((tmer - 1))
sleep 10s
done
```



```
#!/bin/bash
tmer=10
while [ $tmer -gt 0 ]
do
echo "timer ticker is $tmer"
tmer=$((tmer - 1))
sleep 1s
done
```



```
(root@LAPTOP-CEEMFUHE)~[/home/jag]
# ./coba.sh
timer ticker is 10
timer ticker is 9
timer ticker is 8
timer ticker is 7
timer ticker is 6
timer ticker is 5
timer ticker is 4
timer ticker is 3
timer ticker is 2
timer ticker is 1
```

\$ Pemrograman condition shell \$

```
clear
echo "Stok barang hari ini";
echo ".....";
echo "1. beras";
```

```
echo "2. gula";
echo "3. Garam";
echo "4.exit";
read -p *pilih barang keluar [1-4 ] :* pil;
```

```
if [ $pil -eq 1 ];
then
echo " banyak barang = *;
read jum
let bayar=jum*10000;
```

```
elif [ $pil -eq 4 ];
then
exit 0
```

```
else
echo "Barang tidak tersedia"
exit 1
```

```
fi
echo "harga bayar = Rp. $bayar"
echo "Terimakasih atas kunjungan anda"
echo " Kantin TI"
```

```
echo "Stok barang hari ini";
echo ".....";
echo "1.beras";
echo "2.gula";
echo "3.Garam";
echo "4.Kacang";
echo "5.exit";
echo "pilih barang keluar[1-4]:";
read pil

if [ $pil -eq 1 ];
then
echo "banyak barang=";
read jum
let bayar=jum*10000;
```

```
nano kasir.sh
```

```
ls -l kasir.sh
```

```
chmod +x kasir.sh
```

```
ls -l kasir.sh
```

```
./kasir.sh
```

```
(root@LAPTOP-CEEMFUHE)~/home/jag
# ./kasir.sh
Stok barang hari ini
.....
1.beras
2.gula
3.Garam
4.Kacang
5.exit
pilih barang keluar[1-4]:
2
banyak barang=
2
harga bayar=Rp.10000
Terimakasih atas kunjungan anda
Kantin TI
```