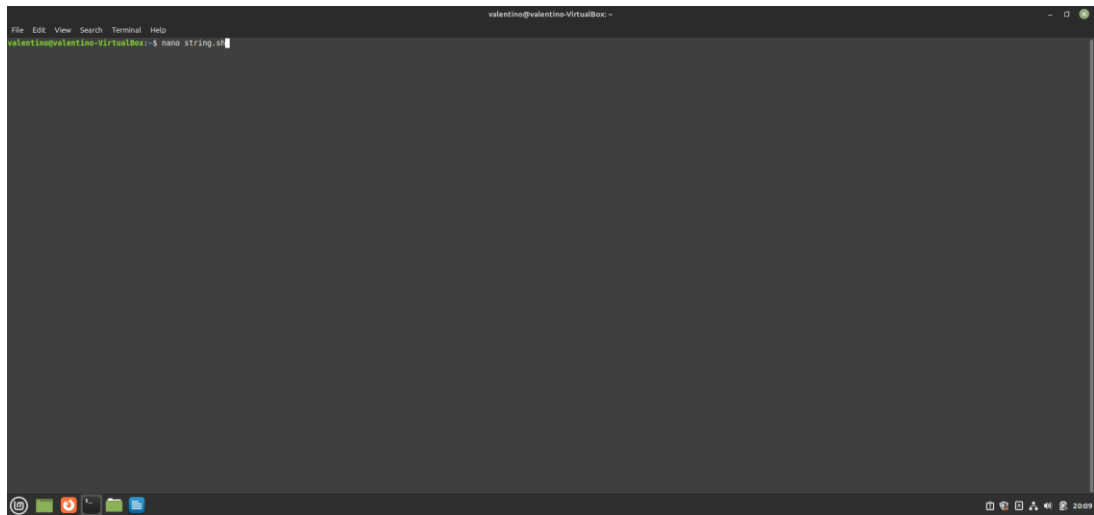


Valentino Belardo
21083010109
Sistem Operasi A

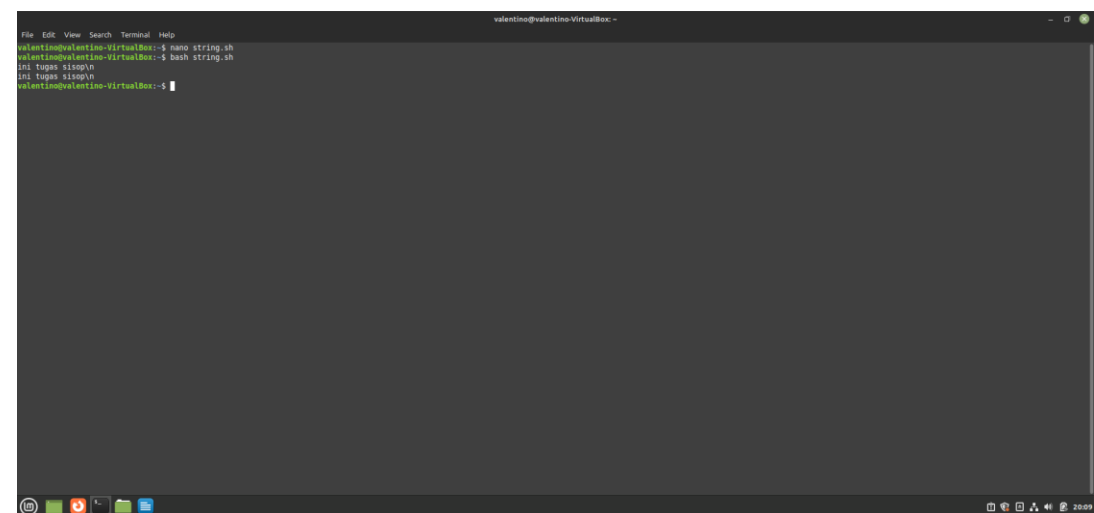
A) Penggunaan String



```
valentino@valentino-VirtualBox:~$ nano string.sh
```



```
valentino@valentino-VirtualBox:~$ nano string.sh
string.sh
echo "ani tugas ssiop/n"
echo "ani tugas ssiop/n"
```



```
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ani tugas ssiop/n
ani tugas ssiop/n
valentino@valentino-VirtualBox:~$
```

B) Penggunaan Array

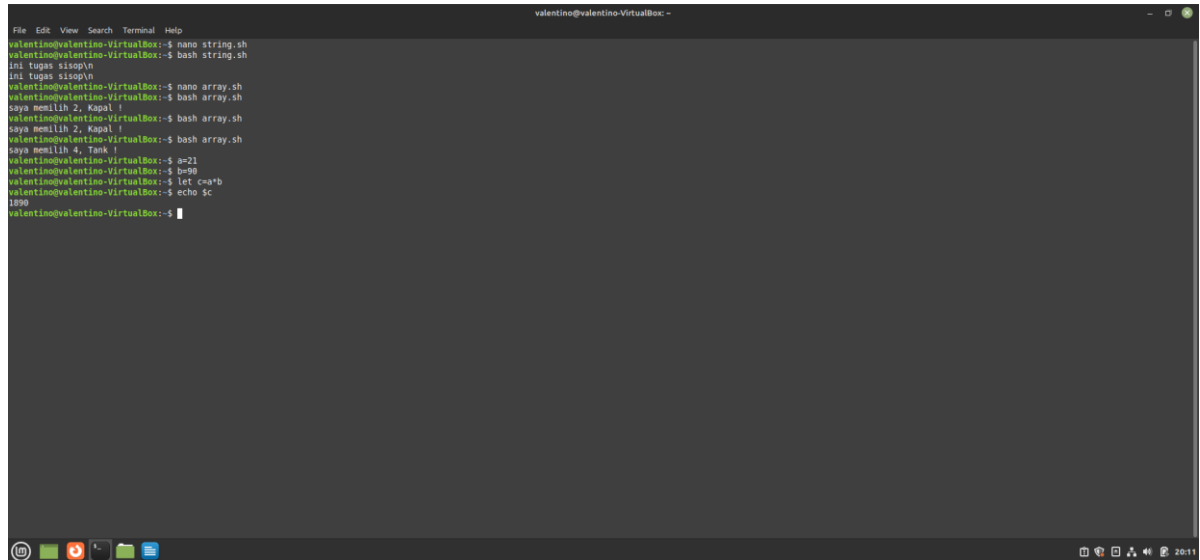
```
File Edit View Search Terminal Help
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ini tugas sisop\n
ini tugas sisop\n
valentino@valentino-VirtualBox:~$ nano array.sh
```

```
File Edit View Search Terminal Help
GNU nano 6.2 array.sh
distroLinux "Mobil" "Motor" "Kapal" "Pesawat" "Tank"
pilih $distroLinux
echo "saya memilih $pilih, ${distroLinux[$pilih]} !"

Help Exit Write Out Read File Where Is Replace Cut Paste Execute Justify Location Go To Line Undo Redo Read 3 lines Set Mark Copy To Bracket Previous Next Back Forward Prev Word Next Word Home End
```

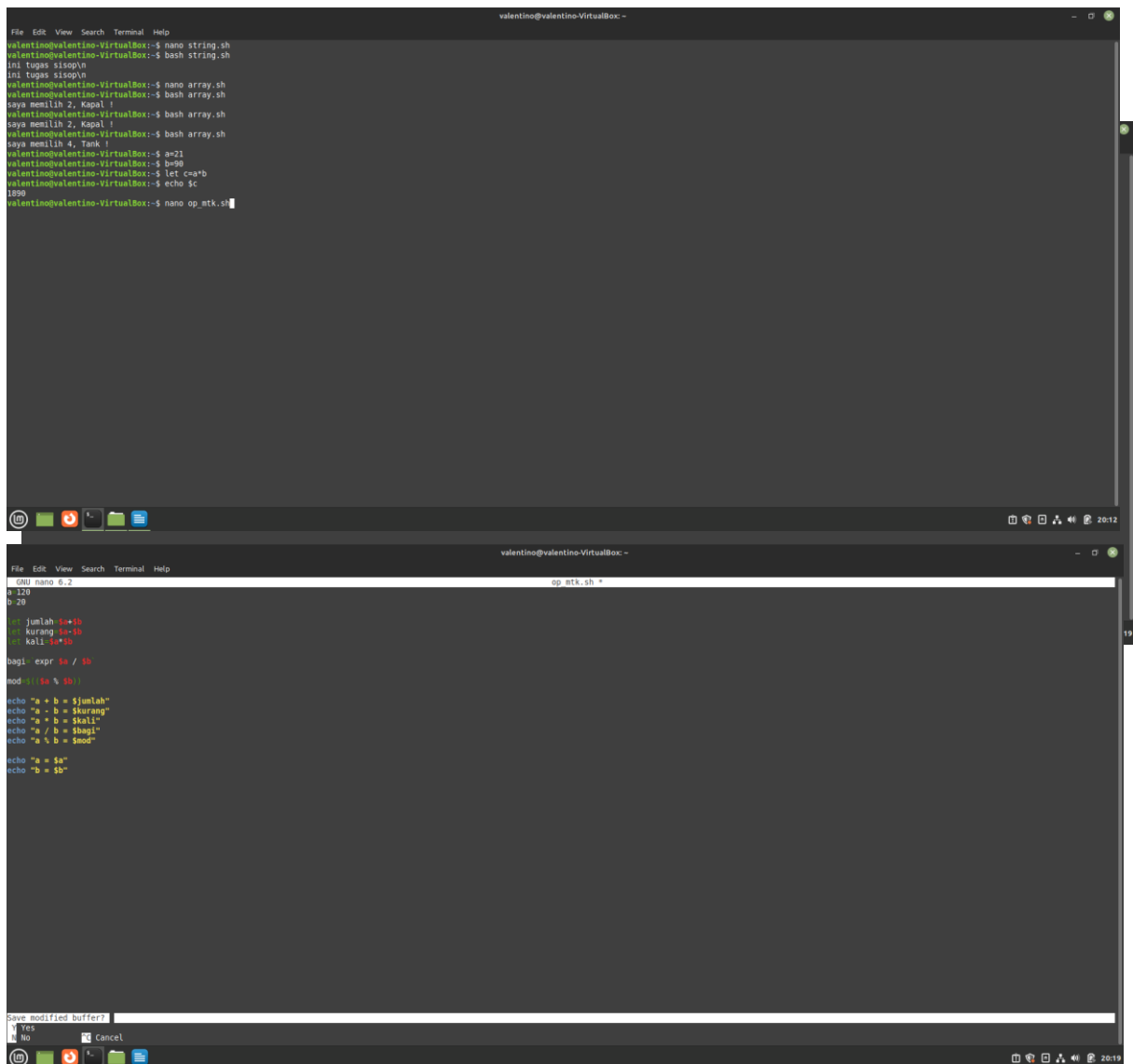
```
File Edit View Search Terminal Help
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ini tugas sisop\n
ini tugas sisop\n
valentino@valentino-VirtualBox:~$ nano array.sh
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 4, Tank !
valentino@valentino-VirtualBox:~$
```

C) Penggunaan Integer



```
File Edit View Search Terminal Help
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ini tugas sisop\n
ini tugas sisop\n
valentino@valentino-VirtualBox:~$ nano array.sh
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 4, Tank !
valentino@valentino-VirtualBox:~$ a=21
valentino@valentino-VirtualBox:~$ b=90
valentino@valentino-VirtualBox:~$ let c=a*b
valentino@valentino-VirtualBox:~$ echo $c
1990
valentino@valentino-VirtualBox:~$
```

D) Penggunaan Operasi Matematika



```
File Edit View Search Terminal Help
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ini tugas sisop\n
ini tugas sisop\n
valentino@valentino-VirtualBox:~$ nano array.sh
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 4, Tank !
valentino@valentino-VirtualBox:~$ a=21
valentino@valentino-VirtualBox:~$ b=90
valentino@valentino-VirtualBox:~$ let c=a*b
valentino@valentino-VirtualBox:~$ echo $c
1990
valentino@valentino-VirtualBox:~$ nano op_mtk.sh

File Edit View Search Terminal Help
valentino@valentino-VirtualBox:~$ nano op_mtk.sh
op_mtk.sh
10
20
20
valentino@valentino-VirtualBox:~$ bash op_mtk.sh
jumlah 10+20
kurang 10-20
kali 10*20
bagi expr 10 / 20
mod 10 % 20
echo "a = $a"
echo "b = $b"
echo "a + b = $jumlah"
echo "a - b = $kurang"
echo "a * b = $kali"
echo "a / b = $bagi"
echo "a % b = $mod"
echo "a = $a"
echo "b = $b"
valentino@valentino-VirtualBox:~$
```

E) Pembuatan Input

```
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ini tugas sisopn
valentino@valentino-VirtualBox:~$ nano array.sh
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal I
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal I
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 4, Tank I
valentino@valentino-VirtualBox:~$ a=21
valentino@valentino-VirtualBox:~$ b=98
valentino@valentino-VirtualBox:~$ let c=a*b
valentino@valentino-VirtualBox:~$ echo $c
1998
valentino@valentino-VirtualBox:~$ nano op_mtk.sh
valentino@valentino-VirtualBox:~$ bash op_mtk.sh
a - b = 140
a - b = 100
a - b = 2400
a / b = 6
a % b = 0
a = 120
b = 20
valentino@valentino-VirtualBox:~$ nano input.sh
```

The terminal window shows the user creating and executing several shell scripts. The scripts include a greeting script, an array selection script, a multiplication script, and an arithmetic script. The user is currently editing 'input.sh'.

F) Penampilan Output

```
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ini tugas sisopn
valentino@valentino-VirtualBox:~$ nano array.sh
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal I
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal I
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 4, Tank I
valentino@valentino-VirtualBox:~$ a=21
valentino@valentino-VirtualBox:~$ b=98
valentino@valentino-VirtualBox:~$ let c=a*b
valentino@valentino-VirtualBox:~$ echo $c
1998
valentino@valentino-VirtualBox:~$ nano op_mtk.sh
valentino@valentino-VirtualBox:~$ bash op_mtk.sh
a - b = 140
a - b = 100
a - b = 2400
a / b = 6
a % b = 0
a = 120
b = 20
valentino@valentino-VirtualBox:~$ nano input.sh
valentino@valentino-VirtualBox:~$ bash input.sh
who are you : Vincent
welcome back Vincent
valentino@valentino-VirtualBox:~$ nano output1.sh
valentino@valentino-VirtualBox:~$ bash output1.sh
Hello, who are you
Destia
Hai Destia!
Welcome Back at Motorcycle Harley Davidson:))))
valentino@valentino-VirtualBox:~$ nano output2.sh
```

The terminal window shows the execution of the scripts. The output of 'string.sh' is 'ini tugas sisopn'. The output of 'array.sh' is 'saya memilih 2, Kapal I' and 'saya memilih 4, Tank I'. The output of 'op_mtk.sh' is 'a - b = 140', 'a - b = 100', 'a - b = 2400', 'a / b = 6', 'a % b = 0', 'a = 120', and 'b = 20'. The output of 'input.sh' is 'who are you : Vincent' and 'welcome back Vincent'. The output of 'output1.sh' is 'Hello, who are you' and 'Destia'. The output of 'output2.sh' is 'Hai Destia!', 'Welcome Back at Motorcycle Harley Davidson:))))', and 'valentino@valentino-VirtualBox:~\$ nano output2.sh'.

```
valentino@valentino-VirtualBox: ~
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ini tugas sisopn
ini tugas sisopn
valentino@valentino-VirtualBox:~$ nano array.sh
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 4, Tank !
valentino@valentino-VirtualBox:~$ a=21
valentino@valentino-VirtualBox:~$ b=99
valentino@valentino-VirtualBox:~$ let c=a*b
valentino@valentino-VirtualBox:~$ echo $c
1998
valentino@valentino-VirtualBox:~$ nano op_mtk.sh
valentino@valentino-VirtualBox:~$ bash op_mtk.sh
a = b = 140
a = b = 100
a = b = 2400
a / b = 6
a % b = 0
a = 120
b = 20
valentino@valentino-VirtualBox:~$ nano input.sh
valentino@valentino-VirtualBox:~$ bash input.sh
who are you : Vincent
welcome back Vincent
valentino@valentino-VirtualBox:~$ nano output1.sh
valentino@valentino-VirtualBox:~$ bash output1.sh
Hello, who are you
Destia
Hai Destia!
welcome Back at Motorcycle Harley Davidson!!!!
valentino@valentino-VirtualBox:~$ nano output2.sh
valentino@valentino-VirtualBox:~$ bash output2.sh
OS : Windows 10 Home
1
10.00 float
10.0 float
valentino@valentino-VirtualBox:~$
```

G) Percabangan

```
valentino@valentino-VirtualBox: ~
valentino@valentino-VirtualBox:~$ nano string.sh
valentino@valentino-VirtualBox:~$ bash string.sh
ini tugas sisopn
ini tugas sisopn
valentino@valentino-VirtualBox:~$ nano array.sh
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 2, Kapal !
valentino@valentino-VirtualBox:~$ bash array.sh
saya memilih 4, Tank !
valentino@valentino-VirtualBox:~$ a=21
valentino@valentino-VirtualBox:~$ b=99
valentino@valentino-VirtualBox:~$ let c=a*b
valentino@valentino-VirtualBox:~$ echo $c
1998
valentino@valentino-VirtualBox:~$ nano op_mtk.sh
valentino@valentino-VirtualBox:~$ bash op_mtk.sh
a = b = 140
a = b = 100
a = b = 2400
a / b = 6
a % b = 0
a = 120
b = 20
valentino@valentino-VirtualBox:~$ nano input.sh
valentino@valentino-VirtualBox:~$ bash input.sh
who are you : Vincent
welcome back Vincent
valentino@valentino-VirtualBox:~$ nano output1.sh
valentino@valentino-VirtualBox:~$ bash output1.sh
Hello, who are you
Destia
Hai Destia!
welcome Back at Motorcycle Harley Davidson!!!!
valentino@valentino-VirtualBox:~$ nano output2.sh
valentino@valentino-VirtualBox:~$ bash output2.sh
OS : Windows 10 Home
1
10.00 float
10.0 float
valentino@valentino-VirtualBox:~$ nano percabangan1.sh
valentino@valentino-VirtualBox:~$ bash percabangan1.sh
a tidak sama dengan b
valentino@valentino-VirtualBox:~$ nano percabangan2.sh

GNU nano 6.2 percabangan2.sh
#!/bin/bash
echo "mobil apa yang kamu sukain?"
printf "Tesla\n"
printf "BMW\n"
printf "Lamborghini\n"

read mobil

if [ "$mobil" == "Tesla" ]
then
echo "Tesla canggih banget"
elif [ "$mobil" == "BMW" ]
then
echo "BMW keren bat"
elif [ "$mobil" == "Lamborghini" ]
then
echo "Lamborghini gahar slurr"
else
echo "mobil apa iki?"
fi
```

H) Latihan soal

```
valentino@valentino-VirtualBox: ~
File Edit View Search Terminal Help
valentino@valentino-VirtualBox:~$ bash array.sh
Saya memilih 4, Task 1
valentino@valentino-VirtualBox:~$ a=21
valentino@valentino-VirtualBox:~$ b=98
valentino@valentino-VirtualBox:~$ let c=a*b
valentino@valentino-VirtualBox:~$ echo $c
2058
valentino@valentino-VirtualBox:~$ nano op_mtk.sh
valentino@valentino-VirtualBox:~$ bash op_mtk.sh
a = 140
b = 100
a * b = 14000
a / b = 1.4
a % b = 0
a = 120
b = 20
valentino@valentino-VirtualBox:~$ nano input.sh
valentino@valentino-VirtualBox:~$ bash input.sh
Who are you - Vincent
Welcome back Vincent
valentino@valentino-VirtualBox:~$ output1.sh
output1.sh: command not found
valentino@valentino-VirtualBox:~$ nano output1.sh
valentino@valentino-VirtualBox:~$ bash output1.sh
Hello, who are you
Desta
Hai Desta!
Welcome Back at Motorcycle Harley Davidson:)))
valentino@valentino-VirtualBox:~$ nano output2.sh
valentino@valentino-VirtualBox:~$ bash output2.sh
OS : Windows 10 Home
2
10.00 float
10.0 float
valentino@valentino-VirtualBox:~$ nano percabangan1.sh
valentino@valentino-VirtualBox:~$ bash percabangan1.sh
a tidak sama dengan b
valentino@valentino-VirtualBox:~$ nano percabangan2.sh
valentino@valentino-VirtualBox:~$ bash percabangan2.sh
Mobil apa yang kamu suka?
Tesla?
BMW?
Lamborghini?
Tesla
Tesla canggih banget
valentino@valentino-VirtualBox:~$ nano Tugas_2.sh
```

```
GNU nano 6.2
File Edit View Search Terminal Help
Tugas 2.sh
echo "a = 1200"
echo "b = 30"
echo "c = a dibagi b"
echo -e "\pernyataan yang benar mengenai c adalah"
echo "a. c lebih besar daripada b"
echo "b. c lebih besar daripada a"
echo -e "c. c sama dengan a"
echo "jawabannya adalah..."

a = 1200
b = 30
c = expr $a / $b

if [ $c -gt 10 ]
then
echo "a benar"
else
echo "b benar"
fi

if [ $c -lt 10 ]
then
echo "c benar"
else
echo "error"
fi

Help Exit Write Out Where Is Cut Paste Execute Justify Location Go To Line Undo Redo Set Mark Copy To Bracket Previous Next Back Forward Prev Word Next Word Home End
```

```
valentino@valentino-VirtualBox: ~
File Edit View Search Terminal Help
a % b = 0
a = 120
b = 20
valentino@valentino-VirtualBox:~$ nano input.sh
valentino@valentino-VirtualBox:~$ bash input.sh
Who are you - Vincent
Welcome back Vincent
valentino@valentino-VirtualBox:~$ output1.sh
output1.sh: command not found
valentino@valentino-VirtualBox:~$ nano output1.sh
valentino@valentino-VirtualBox:~$ bash output1.sh
Hello, who are you
Desta
Hai Desta!
Welcome Back at Motorcycle Harley Davidson:)))
valentino@valentino-VirtualBox:~$ nano output2.sh
valentino@valentino-VirtualBox:~$ bash output2.sh
OS : Windows 10 Home
2
10.00 float
10.0 float
valentino@valentino-VirtualBox:~$ nano percabangan1.sh
valentino@valentino-VirtualBox:~$ bash percabangan1.sh
a tidak sama dengan b
valentino@valentino-VirtualBox:~$ nano percabangan2.sh
valentino@valentino-VirtualBox:~$ bash percabangan2.sh
Mobil apa yang kamu suka?
Tesla?
BMW?
Lamborghini?
Tesla
Tesla canggih banget
valentino@valentino-VirtualBox:~$ nano Tugas_2.sh
valentino@valentino-VirtualBox:~$ bash Tugas_2.sh
a = 1200
b = 30
c = a dibagi b
pernyataan yang benar mengenai c adalah
a. c lebih besar daripada b
b. c lebih besar daripada a
c. c sama dengan a
jawabannya adalah...
a benar
valentino@valentino-VirtualBox:~$
```