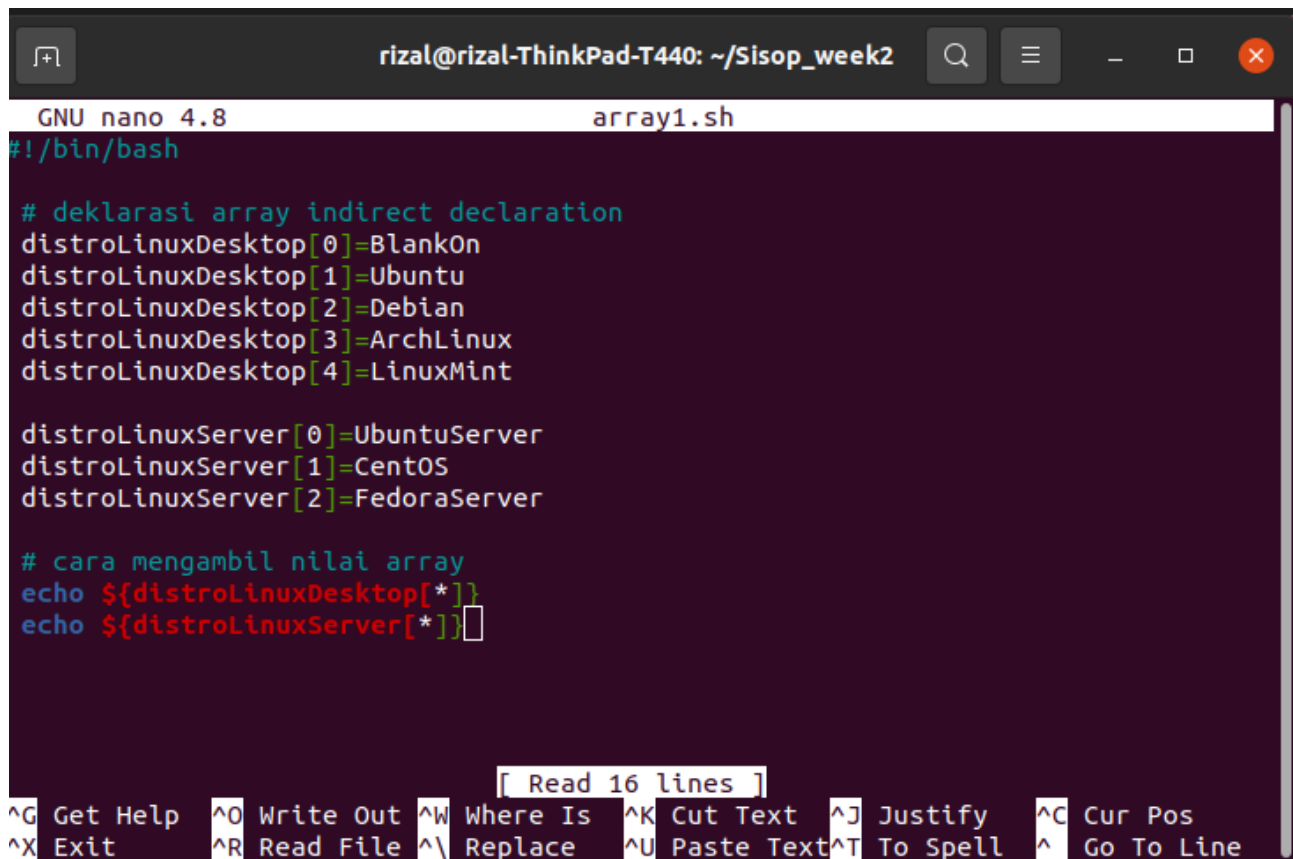


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Laporan Tugas 6

1.Array Indirect Declaration

Script



The screenshot shows a terminal window titled "rizal@rizal-ThinkPad-T440: ~/Sisop_week2" with a search bar and window controls. The editor is GNU nano 4.8 editing "array1.sh". The script content is as follows:

```
#!/bin/bash

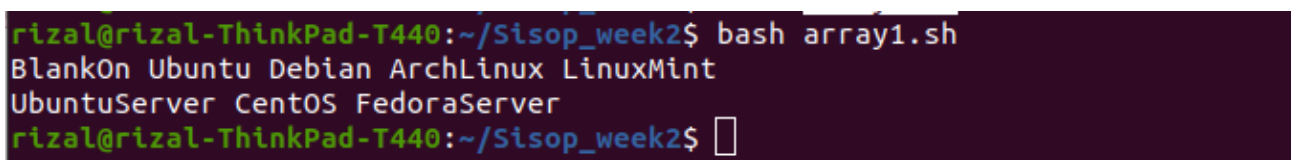
# deklarasi array indirect declaration
distroLinuxDesktop[0]=BlankOn
distroLinuxDesktop[1]=Ubuntu
distroLinuxDesktop[2]=Debian
distroLinuxDesktop[3]=ArchLinux
distroLinuxDesktop[4]=LinuxMint

distroLinuxServer[0]=UbuntuServer
distroLinuxServer[1]=CentOS
distroLinuxServer[2]=FedoraServer

# cara mengambil nilai array
echo ${distroLinuxDesktop[*]}
echo ${distroLinuxServer[*]}
```

At the bottom of the editor, a status bar shows "Read 16 lines" and a list of keyboard shortcuts: ^G Get Help, ^O Write Out, ^W Where Is, ^K Cut Text, ^J Justify, ^C Cur Pos, ^X Exit, ^R Read File, ^\ Replace, ^U Paste Text, ^T To Spell, ^_ Go To Line.

Output



The screenshot shows the terminal output after running the script:

```
rizal@rizal-ThinkPad-T440:~/Sisop_week2$ bash array1.sh
BlankOn Ubuntu Debian ArchLinux LinuxMint
UbuntuServer CentOS FedoraServer
rizal@rizal-ThinkPad-T440:~/Sisop_week2$
```

2. Array Explicit Declaration

Script

```
rizal@rizal-ThinkPad-T440: ~/Sisop_week2
GNU nano 4.8 array2.sh
#!/bin/bash
# deklarasikan array [Explicit Declaration] :
declare -a angka

#clear
i=0;
while [ $i -le 4 ];
do
let isi=$i*2;
angka[$i]=$isi;
let i=$i+1;
done

#tampilkan semua elemen array
#dengan indexnya berisi "*" atau "@"
echo ${angka[@]}
```

Output

```
rizal@rizal-ThinkPad-T440:~/Sisop_week2$ bash array2.sh
0 2 4 6 8
rizal@rizal-ThinkPad-T440:~/Sisop_week2$
```

3. Compound Assignment

Script

```
rizal@rizal-ThinkPad-T440: ~/Sisop_week2
GNU nano 4.8 array3.sh
#!/bin/bash
#deklarasi array compound assignment
distroLinuxDesktop=('BlankOn' 'Ubuntu' 'Debian' 'ArchLinux' 'LinuxMint')
distroLinuxServer=('UbuntuServer' 'CentOS' 'FedoraServer')

#cara mengambil nilai array
echo ${distroLinuxDesktop[*]}
echo ${distroLinuxServer[*]}
```

Output

```
rizal@rizal-ThinkPad-T440:~/Sisop_week2$ bash array3.sh
BlankOn Ubuntu Debian ArchLinux LinuxMint
UbuntuServer CentOS FedoraServer
rizal@rizal-ThinkPad-T440:~/Sisop_week2$
```

4. Array Multi Dimensi

Script

```
GNU nano 4.8 array4.sh M
#!/bin/bash

# deklarasi array2dimensi " : " pemisah nilai (array [3][4])
array2dimensi="1.1:1.2:1.3:1.4 2.1:2.2:2.3:2.4 3.1:3.2:3.3:3.4"

# mengakali multi dimensi -> dengan pemisah dimensi "tr :"
function dimensiBaris {
for baris in $array2dimensi
do
dimensiKolom `echo $baris | tr : " "`
done
}

function dimensiKolom {
for kolom in $*
do
echo -n $kolom " "
done
echo
}

# melakukan pemanggilan fungsi
dimensiBaris
```

Output

```
rizal@rizal-ThinkPad-T440:~/Sisop_week2$ bash array4.sh
1.1 1.2 1.3 1.4
2.1 2.2 2.3 2.4
3.1 3.2 3.3 3.4
rizal@rizal-ThinkPad-T440:~/Sisop_week2$
```

Soal Latihan

Script

```
rizal@rizal-ThinkPad-T440: ~/Sisop_week2
GNU nano 4.8 latihan_array.sh Modified
#!/bin/bash

printf "Banyak Semester yang sudah diikuti?"
read semester

declare -a IPSMahasiswa

i=0
let banyak=$semester-1

while [ $i -le $banyak ]
do
    let angka=$i+1
    printf "nilai Semester %.1i:" $angka;
    read nilaisemester;
    IPSMahasiswa[$i]=$nilaisemester;
    let jumlah=jumlah+$nilaisemester;
    let i=$i+1;
done

let IPK=$jumlah/$semester
echo "nilai per semester" ${IPSMahasiswa[@]}
echo "nilai IPS:" $jumlah "/" $semester
echo "nilai IPK:" $IPK

^G Get Help  ^O Write Out ^W Where Is  ^K Cut Text  ^J Justify   ^C Cur Pos
^X Exit       ^R Read File ^\ Replace   ^U Paste Text ^T To Spell  ^_ Go To Line
```

Output

```
rizal@rizal-ThinkPad-T440:~/Sisop_week2$ bash latihan_array.sh
Banyak Semester yang sudah diikuti?3
nilai Semester 1:36
nilai Semester 2:33
nilai Semester 3:38
nilai per semester 36 33 38
nilai IPS: 107 / 3
nilai IPK: 35
rizal@rizal-ThinkPad-T440:~/Sisop_week2$
```