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## Laporan Tugas 6

### 1. Array Indirect Declaration

- Membuat File nano array\_IndirectDeclaration.sh

imelda@imelda-VirtualBox: ~

```
File Edit View Search Terminal Help
imelda@imelda-VirtualBox:~$ nano array_IndirectDeclaration.sh
```

- Membuat script bash

```
imelda@imelda-VirtualBox: ~
File Edit View Search Terminal Help
GNU nano 2.9.3           array_IndirectDeclaration.sh

#!/bin/bash

# deklarasi array indirect declaration
distroLinuxDesktop[0]=Blank0n
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[*]}

[ Read 16 lines ]
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit      ^R Read File ^V Replace ^U Uncut Text^T To Linter ^ ^ Go To Line
```

- Menjalankan script

```
imelda@imelda-VirtualBox:~$ bash array_IndirectDeclaration.sh
Blank0n Ubuntu Debian ArchLinux LinuxMint
CentOS FedoraServer
```

### 2. Array Explicit Declaration

- Membuat file nano ExplicitDeclaration.sh

```
CentOS FedoraServer
imelda@imelda-VirtualBox: ~$ nano array_IndirectDeclaration.sh
imelda@imelda-VirtualBox: ~$ nano array_ExplicitDeclaration.sh
```

- Membuat script bash

```
imelda@imelda-VirtualBox: ~
File Edit View Search Terminal Help
GNU nano 2.9.3           array ExplicitDeclaration.sh Modified

#!/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[@]}
```

- Menjalankan script

```
imelda@imelda-VirtualBox:~$ bash array_ExplicitDeclaration.sh  
0 2 4 6 8  
imelda@imelda-VirtualBox:~$
```

### 3. Array Compound Assignment

- Membuat nano array\_CompoundAssignment.sh

```
imelda@imelda-VirtualBox:~$ nano array_CompoundAssignment.sh  
imelda@imelda-VirtualBox:~$ bash array_CompoundAssignment.sh
```

- Membuat script bash

```
imelda@imelda-VirtualBox: ~ - x
File Edit View Search Terminal Help
GNU nano 2.9.3 array CompoundAssignment.sh Modified

#!/bin/bash

#deklarasi array compound assignment
distroLinuxDesktop=('Blankon' 'Ubuntu' 'Debian' 'ArchLinux' 'LinuxMint')
distroLinuxServer=('UbuntuServer' 'CentOS' 'FedoraSever')

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

|
```

- Menjalankan script

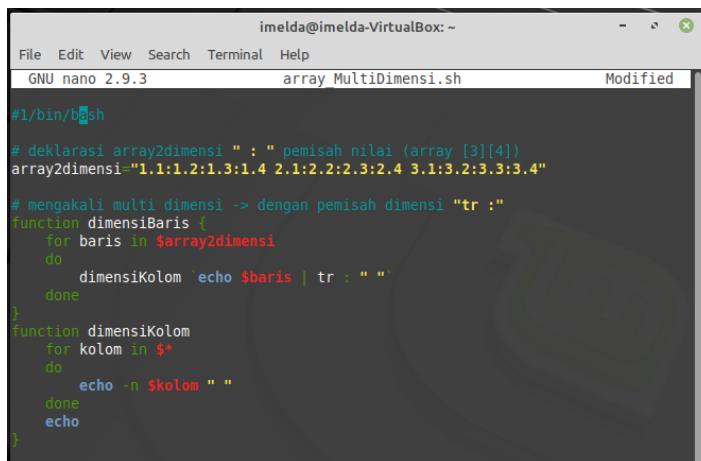
```
imelda@imelda-VirtualBox:~$ bash array_CompoundAssignment.sh
BlankOn Ubuntu Debian ArchLinux LinuxMint
UbuntuServer CentOS FedoraServer
imelda@imelda-VirtualBox:~$
```

## 4. Array Multi Dimensi

- Membuat nano array MultiDimensi.sh

```
imelda@imelda-VirtualBox:~$ nano array_MultiDimensi.sh  
imelda@imelda-VirtualBox:~$ bash array MultiDimensi.sh
```

- Membuat script bash



```
imelda@imelda-VirtualBox:~
```

```
File Edit View Search Terminal Help
```

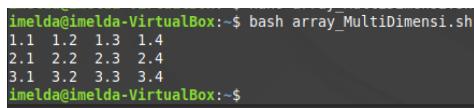
```
GNU nano 2.9.3 array MultiDimensi.sh Modified
```

```
#!/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
}
```

### - Menjalankan script

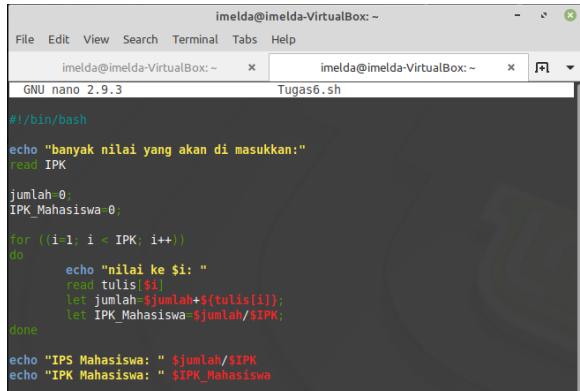


```
imelda@imelda-VirtualBox:~$ bash array_MultiDimensi.sh
```

```
1.1 1.2 1.3 1.4
2.1 2.2 2.3 2.4
3.1 3.2 3.3 3.4
imelda@imelda-VirtualBox:~$
```

## Latihan Soal Array

### - Membuat script bash



```
imelda@imelda-VirtualBox:~
```

```
File Edit View Search Terminal Tabs Help
```

```
imelda@imelda-VirtualBox:~ imelda@imelda-VirtualBox:~
```

```
GNU nano 2.9.3 Tugas6.sh
```

```
#!/bin/bash
```

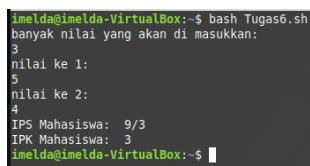
```
echo "banyak nilai yang akan di masukkan:"
read IPK
```

```
jumlah=0
IPK_Mahasiswa=0;
```

```
for ((i=1; i<=$IPK; i++))
do
    echo "nilai ke $i: "
    read tulis[i]
    let jumlah=$jumlah+${tulis[i]}
    let IPK_Mahasiswa=$jumlah/$IPK
done
```

```
echo "IPS Mahasiswa: " $jumlah/$IPK
echo "IPK Mahasiswa: " $IPK_Mahasiswa
```

### - Menjalankan script



```
imelda@imelda-VirtualBox:~$ bash Tugas6.sh
```

```
banyak nilai yang akan di masukkan:
3
nilai ke 1:
5
nilai ke 2:
4
IPS Mahasiswa: 9/3
IPK Mahasiswa: 3
imelda@imelda-VirtualBox:~$
```