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LAPORAN

1. 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
echo ${distroLinuxDesktop[*]}
echo ${distroLinuxServer[*]}
```

```
earlyxcess@ilham-VirtualBox:~/Tugas-SISOP/Tugas6$ bash Array_ID.sh
BlankOn Ubuntu Debian ArchLinux LinuxMint
UbuntuServer CentOS FedoraServer
```

2. Array Explicit Declaration

```
GNU nano 6.2
declare -a angka
i=0;
while [ $i -le 4 ];
do
    let isi=$i*2;
    angka[$i]=$isi;
    let i=$i+1;
done
echo ${angka[@]}
```

```
earlyxcess@ilham-VirtualBox:~/Tugas-SISOP/Tugas6$ bash Array_ED.sh
0 2 4 6 8
```

3. Array Compound Assignment

```
GNU nano 6.2 Array CA.sh
distroLinuxDesktop=('BlankOn' 'Ubuntu' 'Debian' 'ArchLinux' 'LinuxMint')
distroLinuxServer=('UbuntuServer' 'CentOS' 'FedoraServer')
echo ${distroLinuxDesktop[*]}
echo ${distroLinuxServer[*]}
```

```
earlyxcess@ilham-VirtualBox:~/Tugas-SISOP/Tugas6$ bash Array_CA.sh
BlankOn Ubuntu Debian ArchLinux LinuxMint
UbuntuServer CentOS FedoraServer
```

4. Array Multi Dimensi

```
GNU nano 6.2 Array MD.sh
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"

function dimensiBaris {
    for baris in $array2dimensi
    do
        dimensiKolom `echo $baris | tr : " "`
    done
}

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

dimensiBaris

earlyxcess@ilham-VirtualBox:~/Tugas-SISOP/Tugas6$ bash Array_MD.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
```

TUGAS 6

Buatlah program array yang dapat menghitung nilai IPK mahasiswa yang menerapkan beberapa konsep pemrograman bash seperti diatas dengan ketentuan sbb!

- user input data array IPS Mahasiswa [index]
- $IPK = (\text{jumlah nilai IPS}) / (\text{jumlah data IPS})$

Contoh Output :

Input : 3 4 2 3

IPS mhs = 9 / 3

IPK mhs = 3

jawab

```
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
```

```
earlyxcess@ilham-VirtualBox:~/Tugas-SISOP/Tugas6$ bash Tugas6.sh  
Banyak Semester Yang Sudah Diikuti : 3  
nilai semester 1:4  
nilai semester 2:2  
nilai semester 3:3  
nilai per semester 4 2 3  
nilai IPS: 3 / 3  
nilai IPK: 1
```