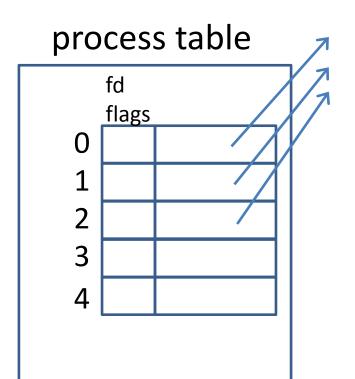
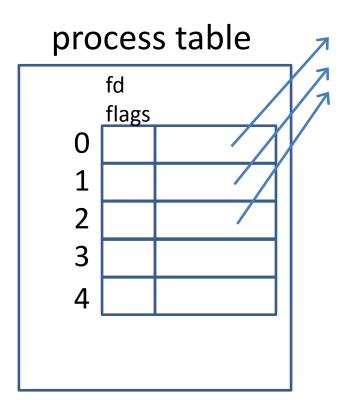


```
int fd1, fd2, fd3;
fd1=open("a"...);
fd2=open("b"...);
close(fd1);
fd3=open("b"...);
```



```
int fd1, fd2, fd3;
fd1=open("a"...);
fd2=open("b"...);
close(fd1);
fd3=open("b"...);
```

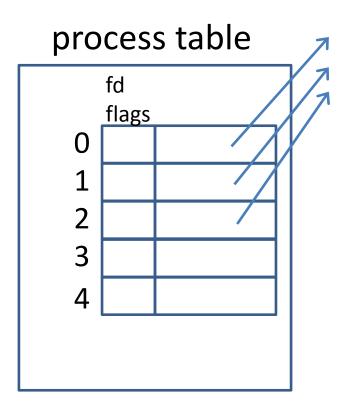


v-node

```
int fd1, fd2, fd3;
fd1=open("a"...);
fd2=open("b"...);
close(fd1);
fd3=open("b"...);
```

fd1

fd2

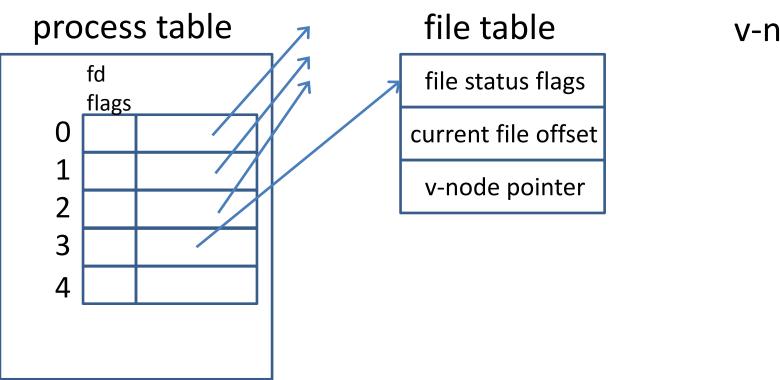


v-node

```
int fd1, fd2, fd3;
fd1=open("a"...);
fd2=open("b"...);
close(fd1);
fd3=open("b"...);
```

fd1

fd2

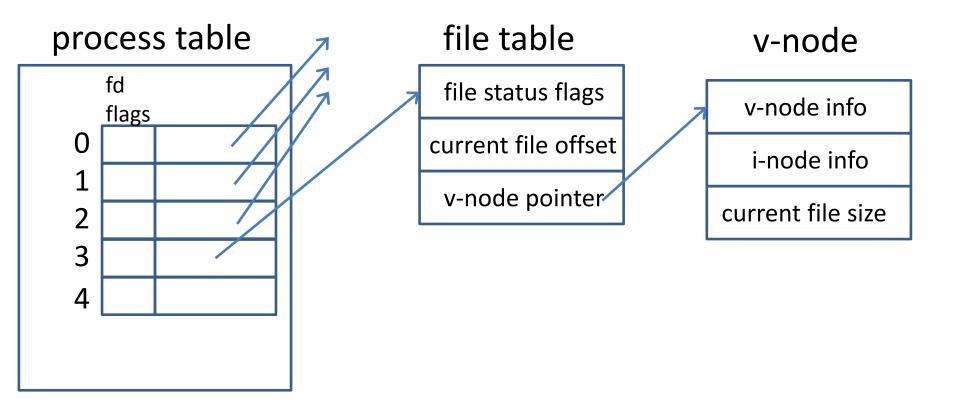


```
v-node
```

```
int fd1, fd2, fd3;
fd1=open("a"...);
fd2=open("b"...);
close(fd1);
fd3=open("b"...);
```

fd1

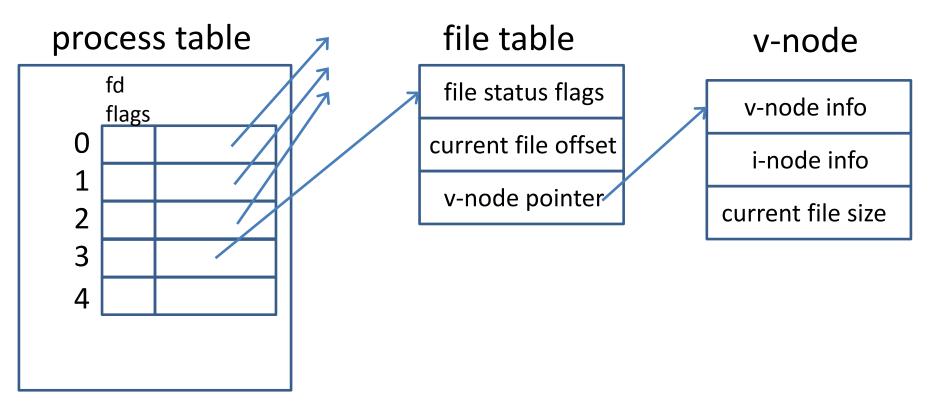
fd2



```
int fd1, fd2, fd3;
fd1=open("a"...);
fd2=open("b"...);
close(fd1);
fd3=open("b"...);
```

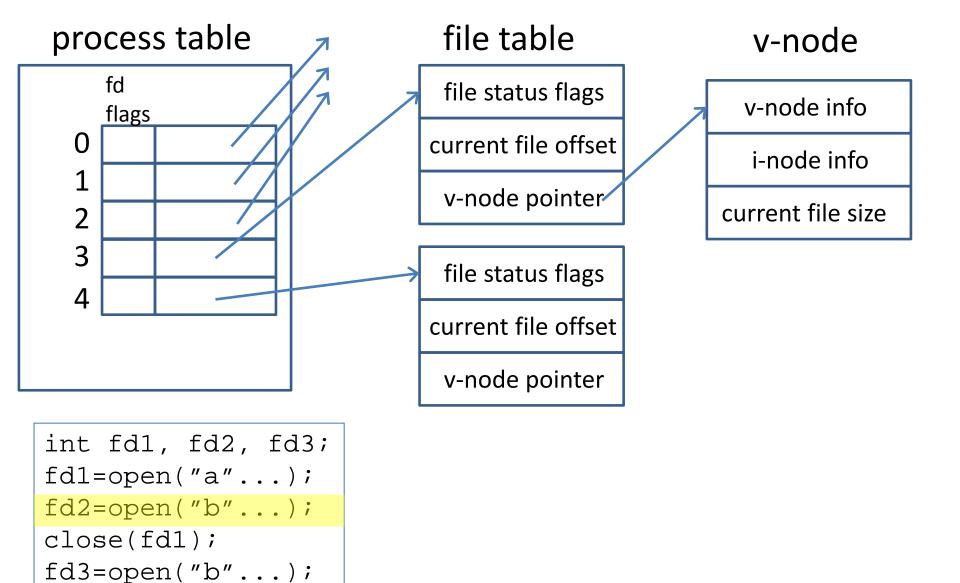
fd1

fd2

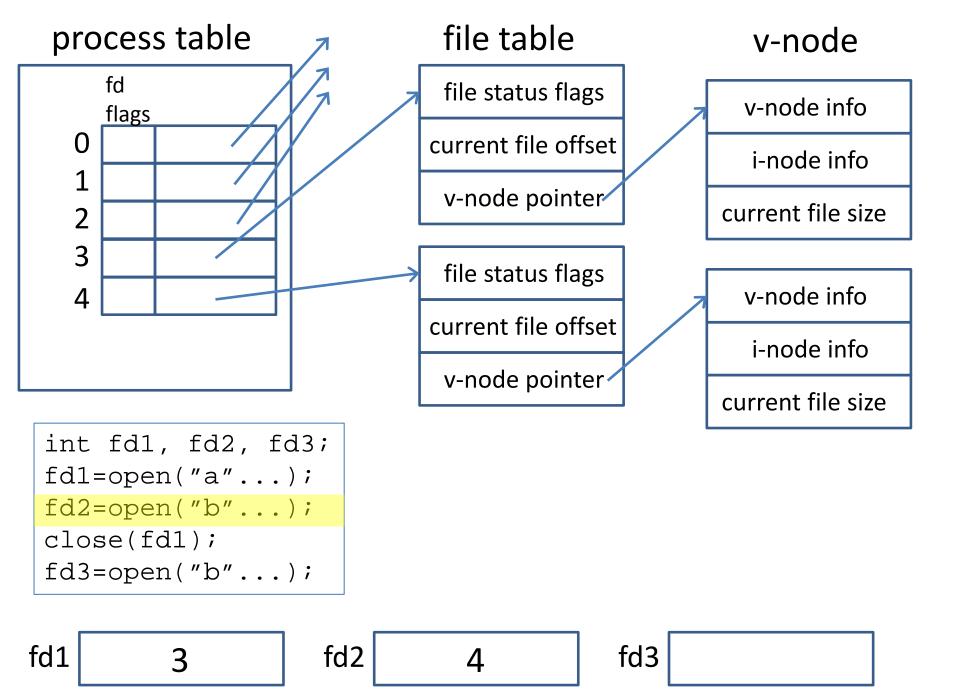


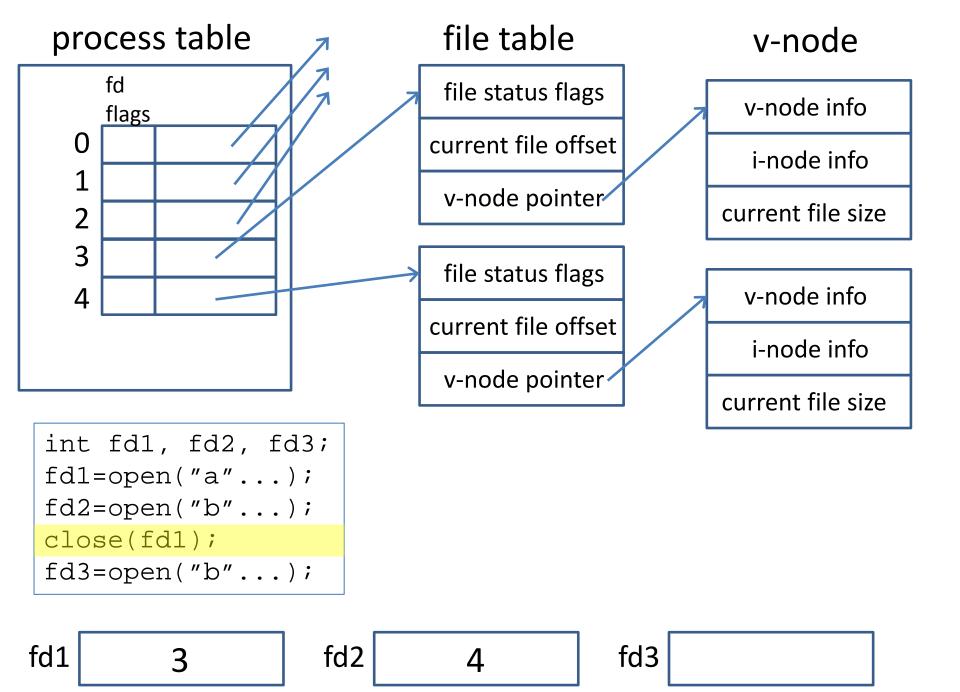
```
int fd1, fd2, fd3;
fd1=open("a"...);
fd2=open("b"...);
close(fd1);
fd3=open("b"...);
```

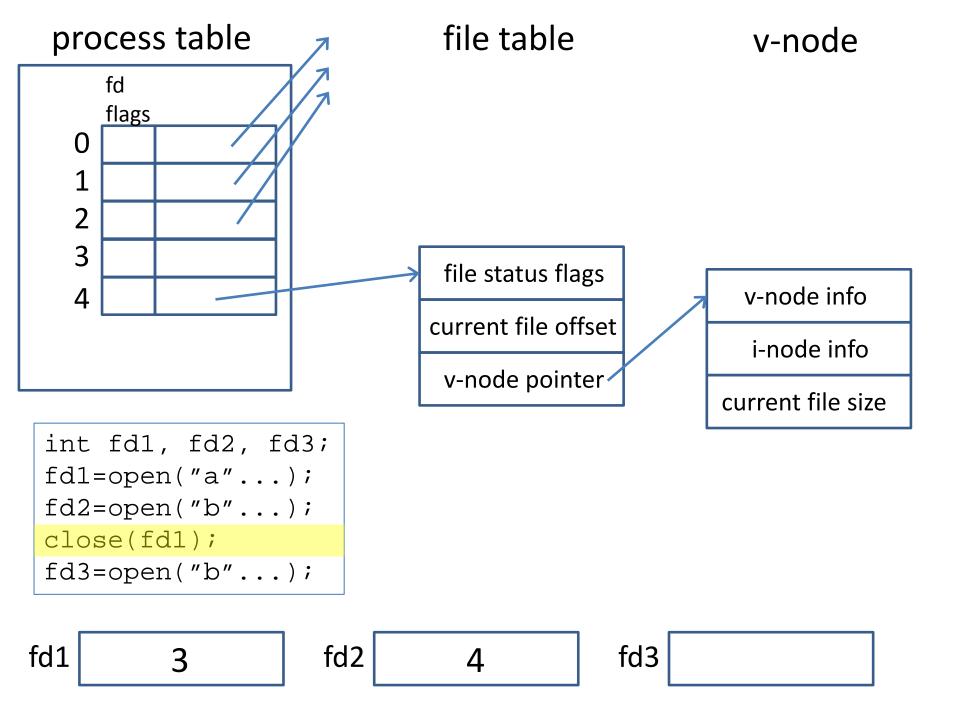
fd1 3 fd2 fd3

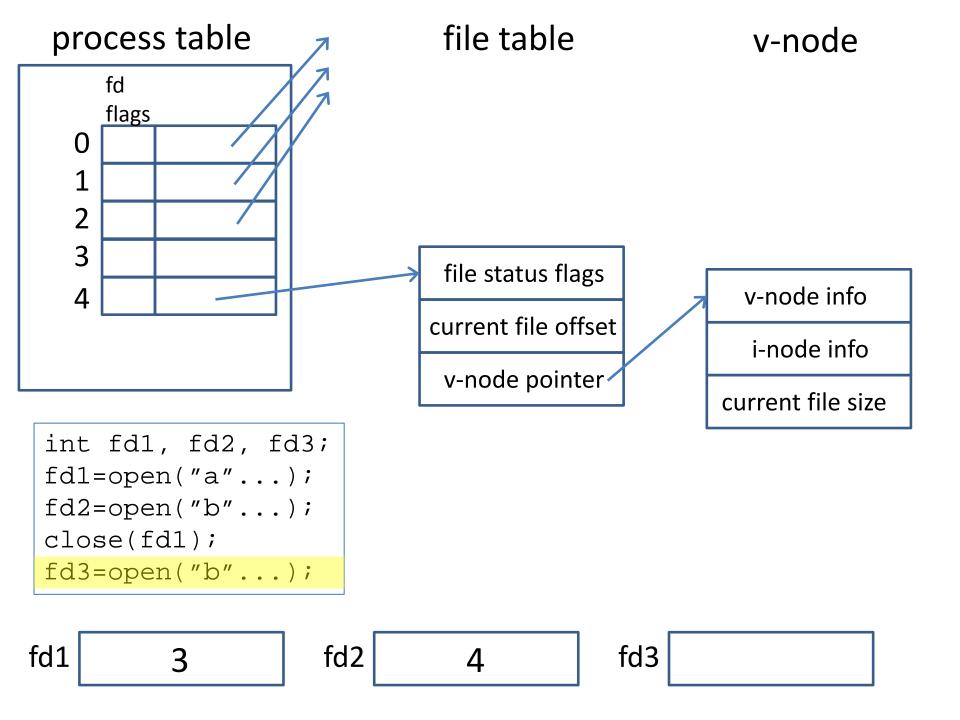


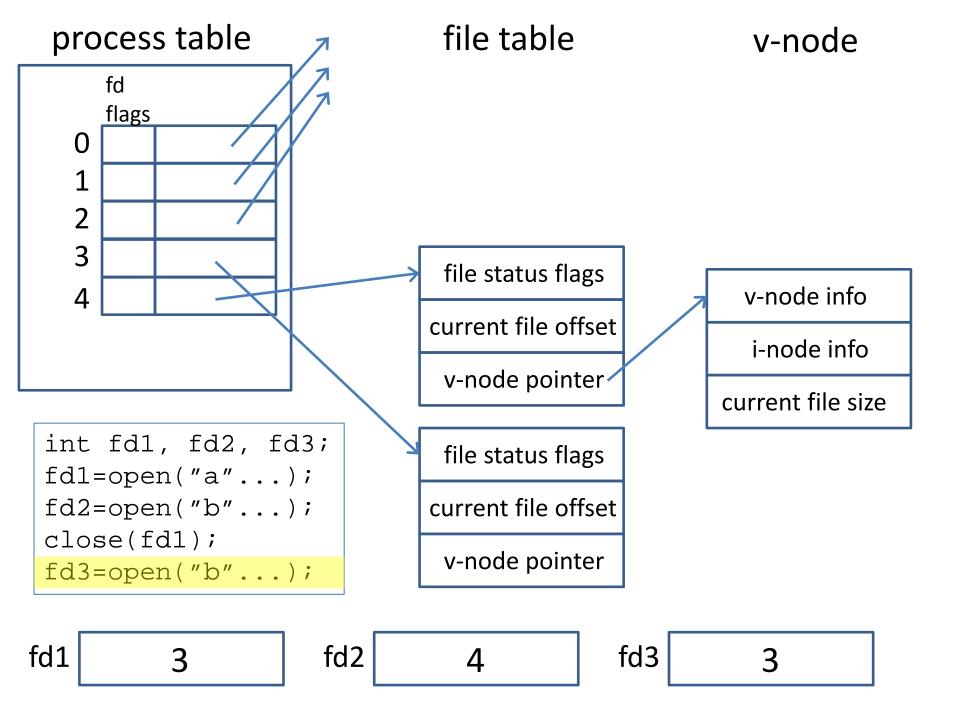
fd1 3 fd2 4 fd3

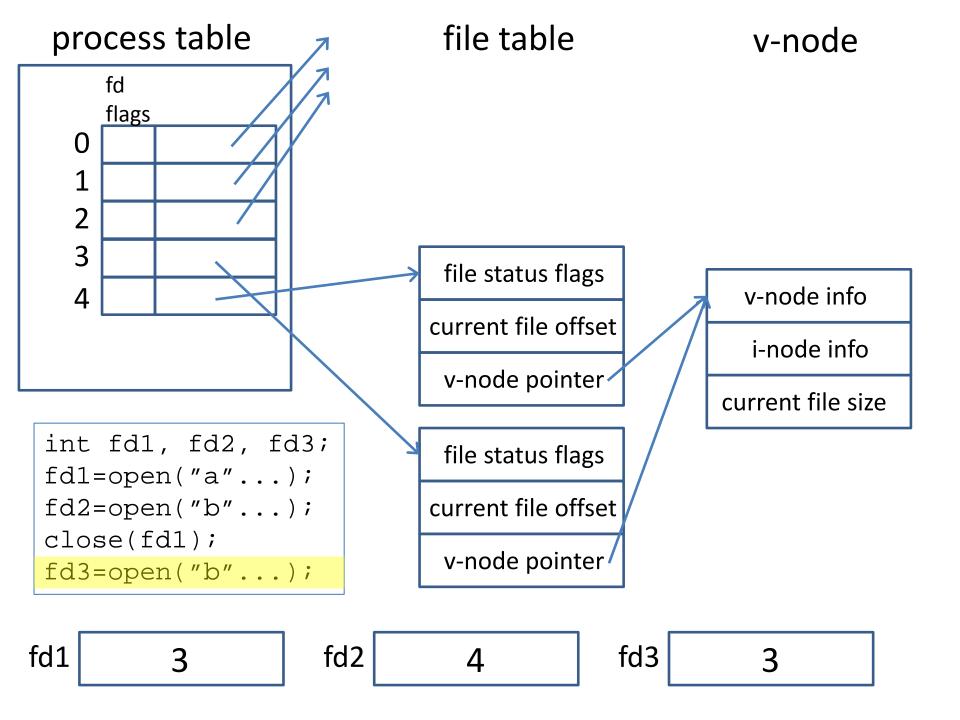




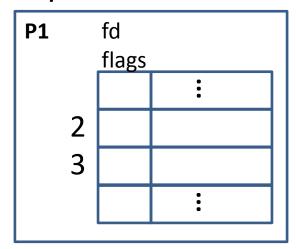








process table

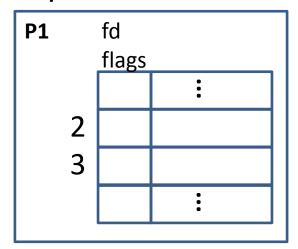


file table

```
int fd1; P1
fd1=open("a"...);
close(fd1);
```

```
int fd1, fd2; P2
fd1=open("b"...);
fd2=open("a"...);
```

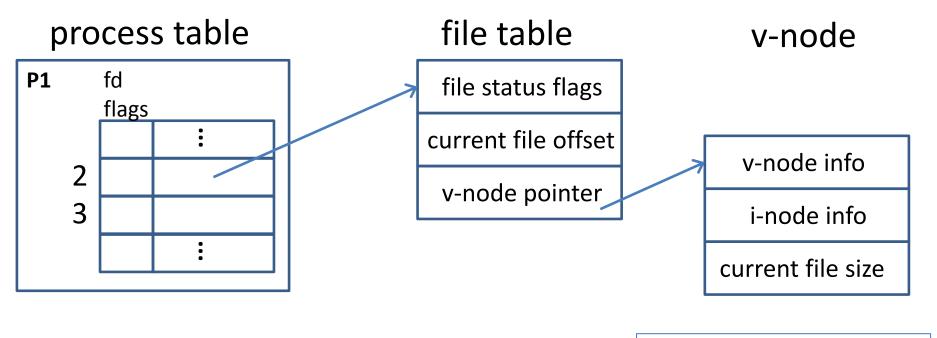
process table



file table

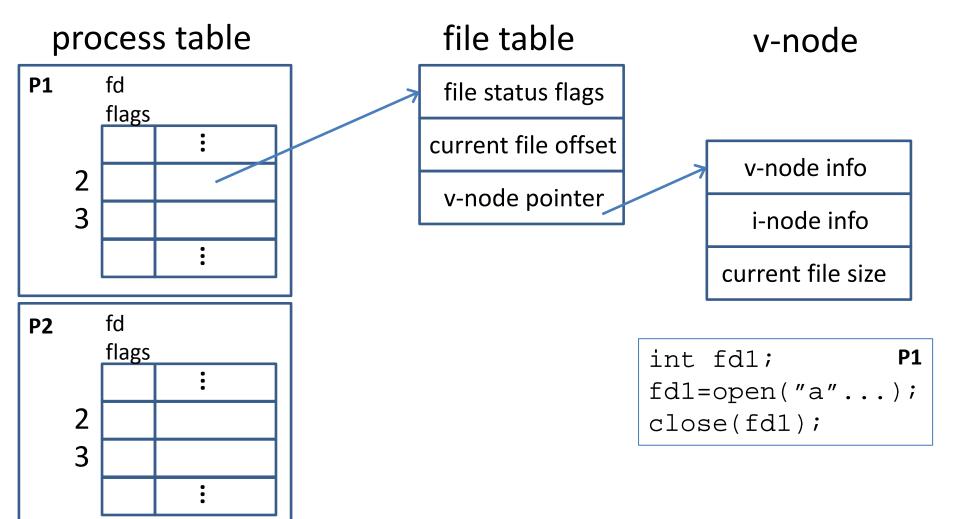
```
int fd1; P1
fd1=open("a"...);
close(fd1);
```

```
int fd1, fd2; P2
fd1=open("b"...);
fd2=open("a"...);
```

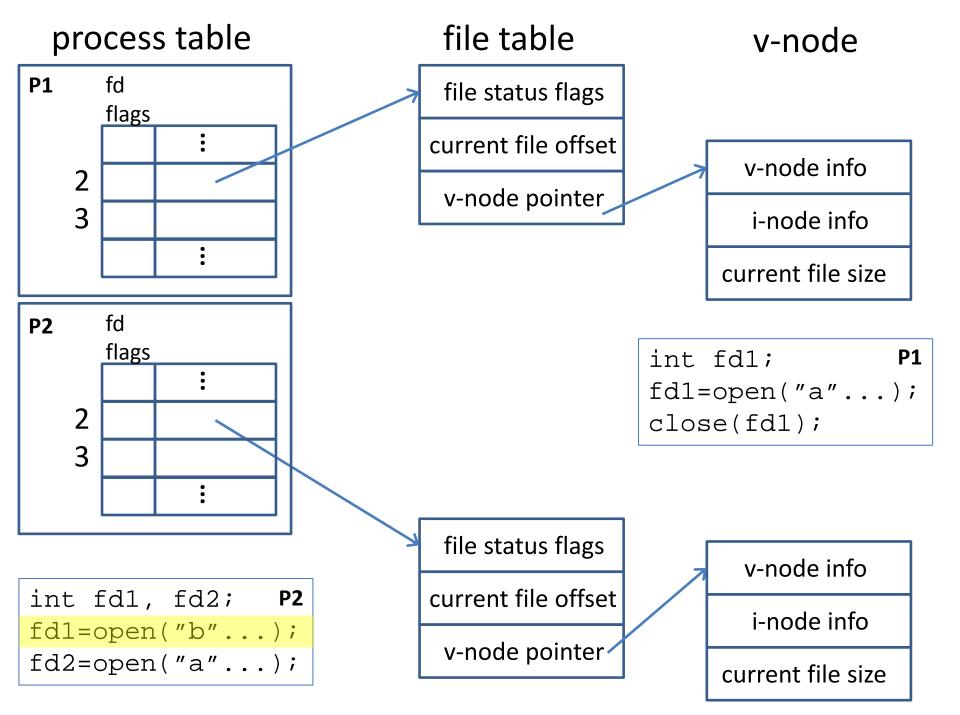


```
int fd1; P1
fd1=open("a"...);
close(fd1);
```

```
int fd1, fd2; P2
fd1=open("b"...);
fd2=open("a"...);
```



```
int fd1, fd2; P2
fd1=open("b"...);
fd2=open("a"...);
```



process table file table v-node **P1** fd file status flags flags current file offset v-node info v-node pointer 3 i-node info current file size fd **P2** flags int fd1; fd1=open("a"...); close(fd1); 3 file status flags v-node info **P2** current file offset int fd1, fd2; i-node info fd1=open("b"...); v-node pointer fd2=open("a"...);

current file size

process table file table v-node **P1** fd file status flags flags current file offset v-node info v-node pointer 3 i-node info current file size file status flags fd **P2** flags int fd1; current file offset fd1=open("a"...); v-node pointer close(fd1); 3 file status flags v-node info current file offset **P2** int fd1, fd2; i-node info fd1=open("b"...); v-node pointer fd2=open("a"...); current file size

process table file table v-node **P1** fd file status flags flags current file offset v-node info v-node pointer 3 i-node info current file size file status flags fd **P2** flags int fd1; current file offset fd1=open("a"...); v-node pointer close(fd1); 3 file status flags v-node info current file offset **P2** int fd1, fd2; i-node info fd1=open("b"...); v-node pointer fd2=open("a"...); current file size

process table

P1 fd flags :


```
int fd1, fd2; P2
fd1=open("b"...);
fd2=open("a"...);
```

file table

file status flags

current file offset v-node pointer

v-node

v-node info
i-node info
current file size

```
int fd1; P1
fd1=open("a"...);
close(fd1);
```

file status flags

current file offset

v-node pointer

v-node info
i-node info
current file size