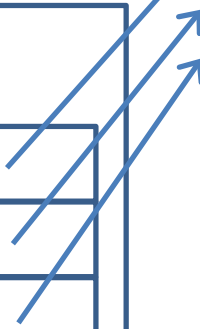


## process table

	fd	flags
0		
1		
2		
3		
4		



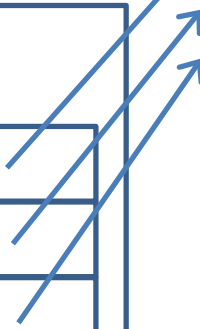
## file table

## v-node

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

process table

	fd	flags
0		
1		
2		
3		
4		



file table

v-node

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

## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

## v-node

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

fd1

fd2

fd3

## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

## v-node

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

fd1

fd2

fd3

## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

## v-node

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

fd1

3

fd2

fd3

## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

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

fd1

3

fd2

fd3

## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

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

fd1

3

fd2

fd3

## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

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

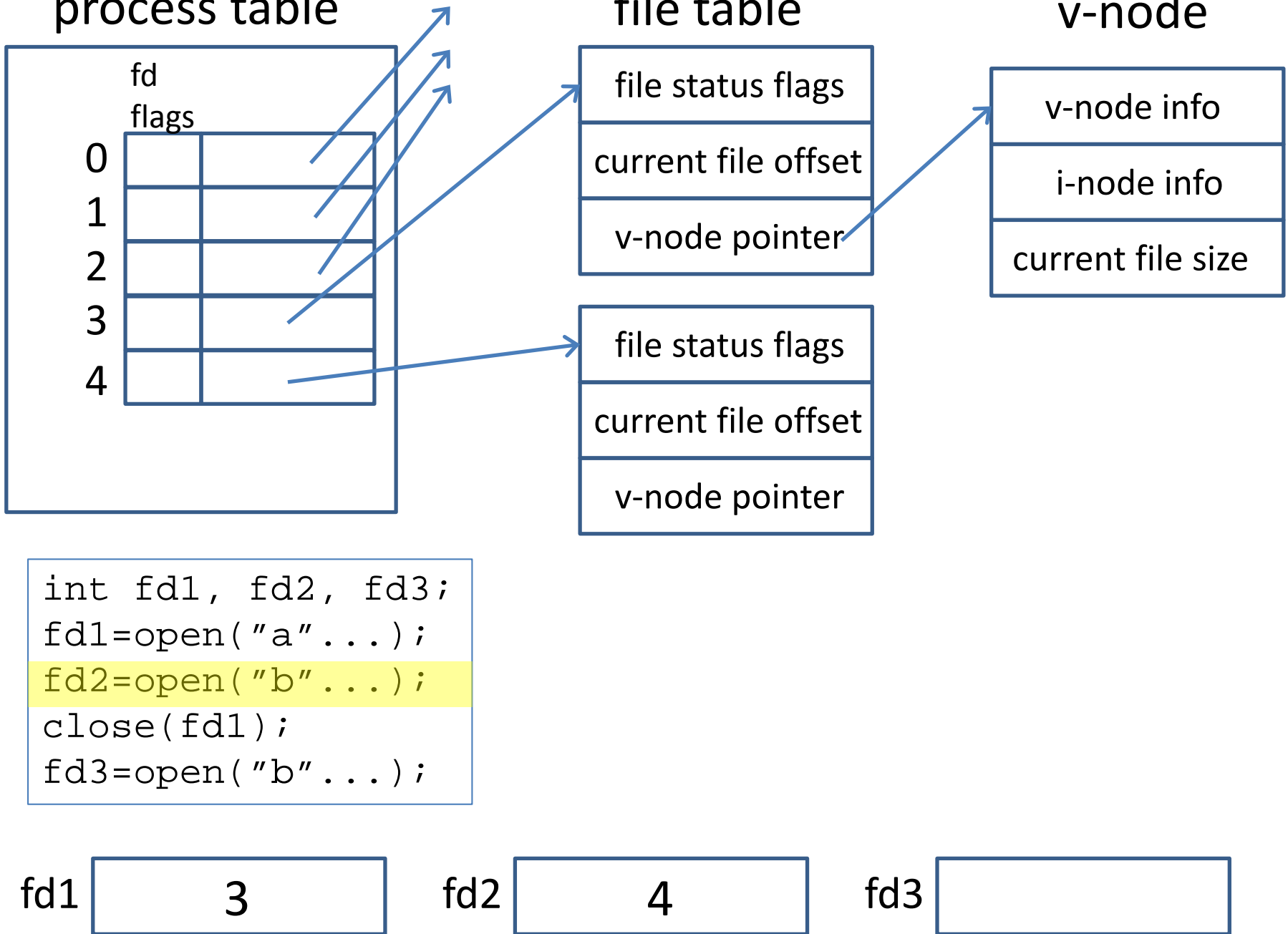
fd1

3

fd2

4

fd3





## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

v-node info
i-node info
current file size

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

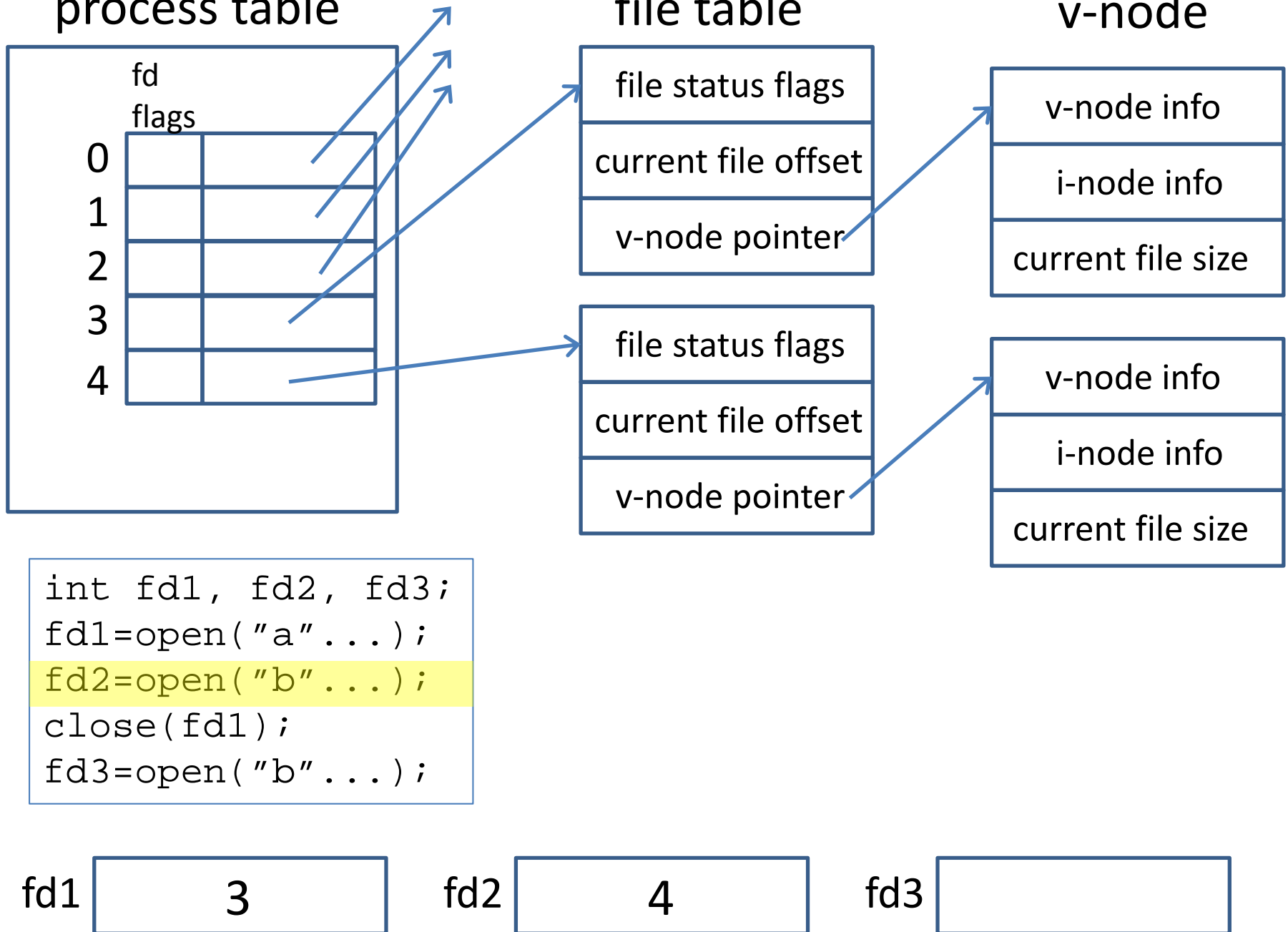
fd1

3

fd2

4

fd3



## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

v-node info
i-node info
current file size

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

fd1

3

fd2

4

fd3

## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

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

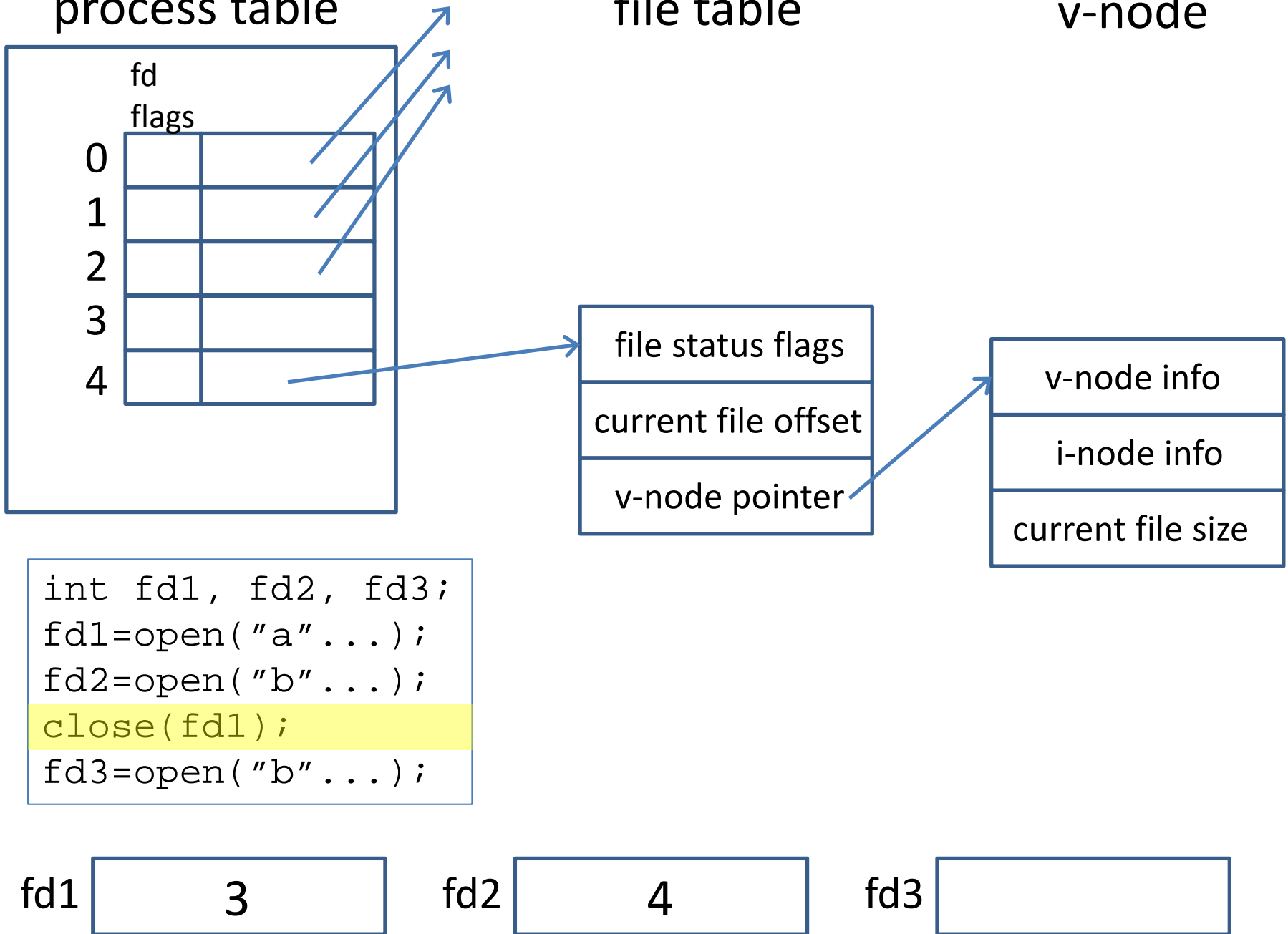
fd1

3

fd2

4

fd3



## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

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

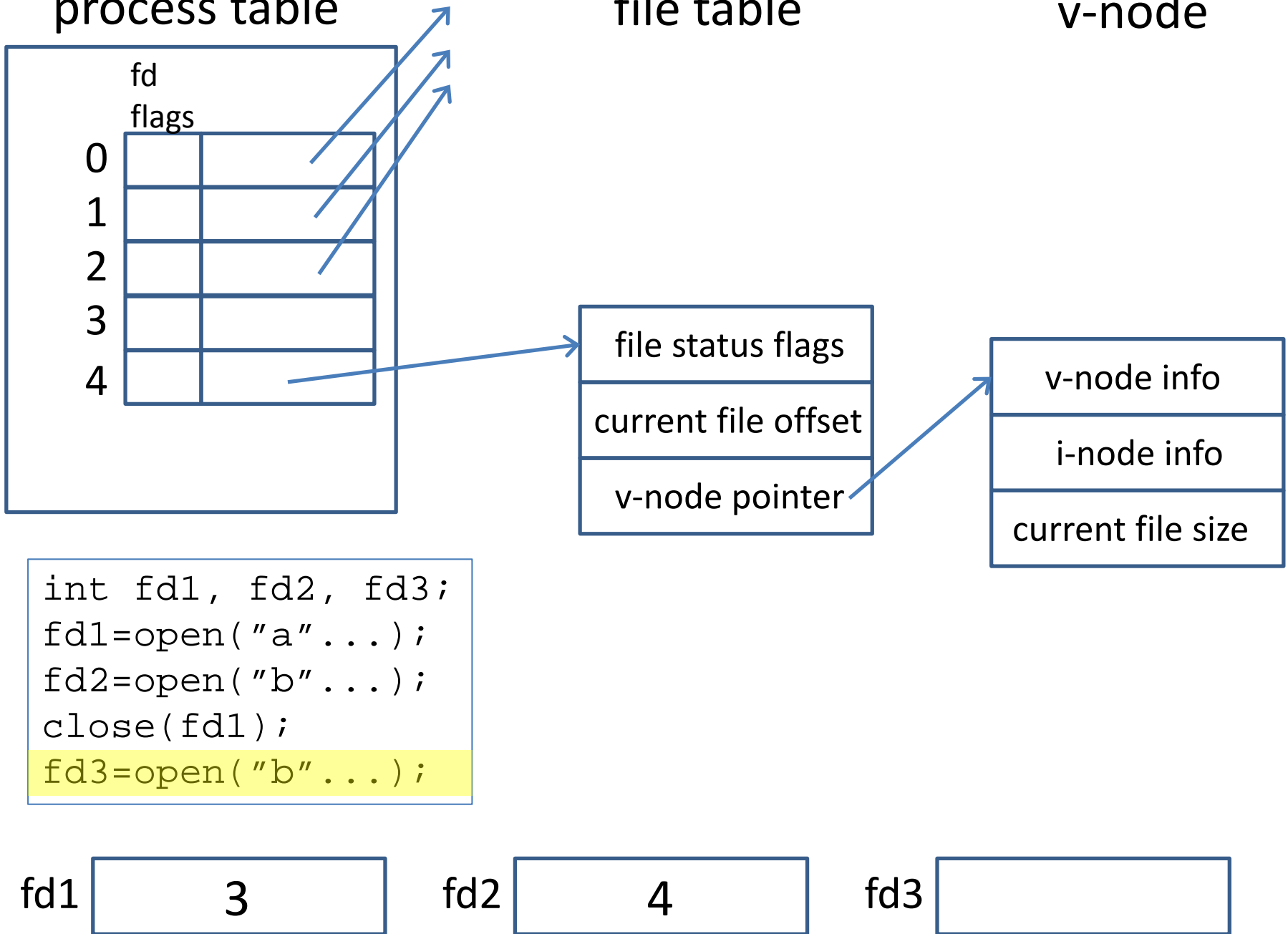
fd1

3

fd2

4

fd3



## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

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

fd1 3

fd2 4

fd3 3

## process table

	fd	flags
0		
1		
2		
3		
4		

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

## v-node

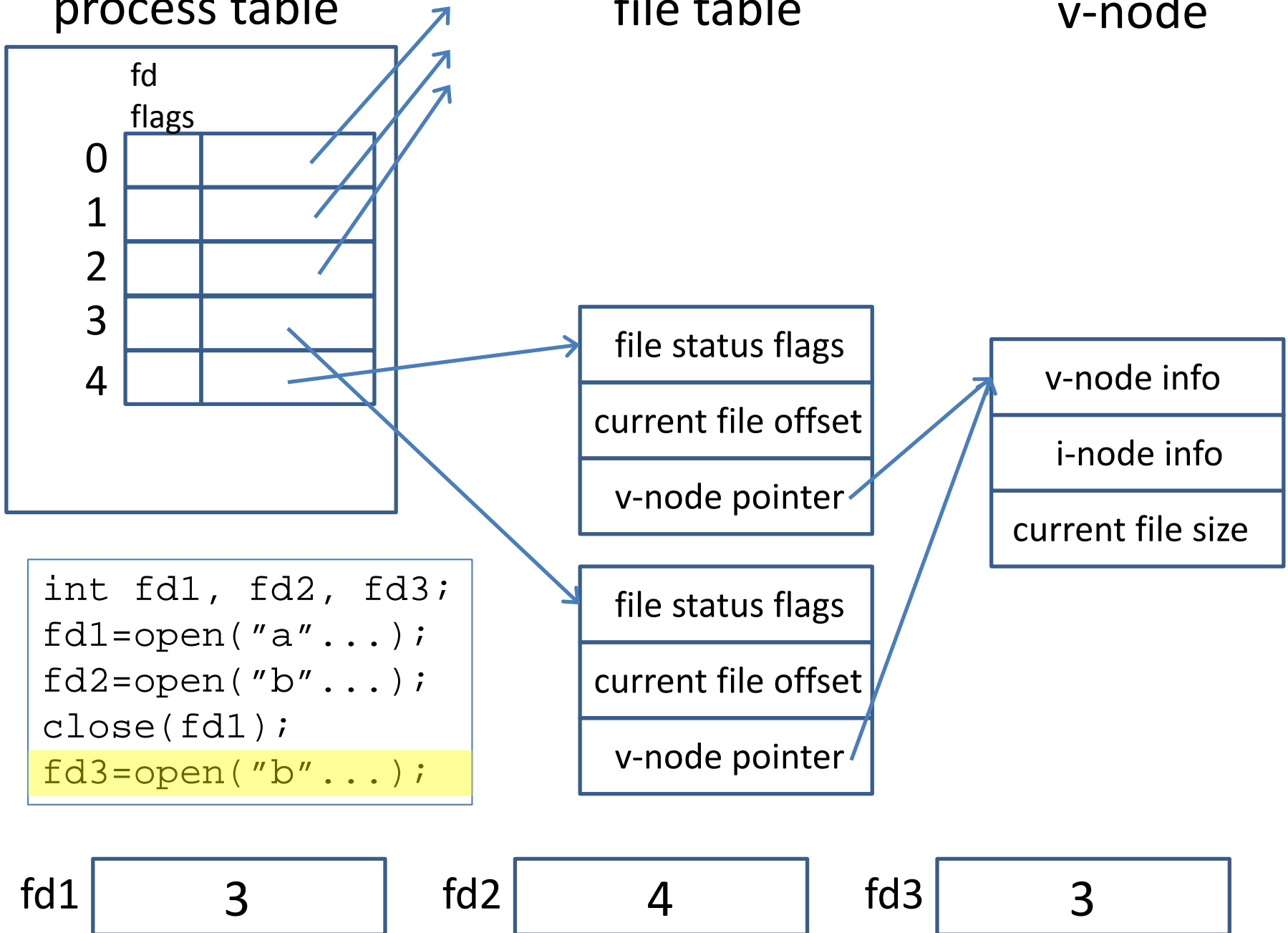
v-node info
i-node info
current file size

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

fd1 3

fd2 4

fd3 3



## process table

<b>P1</b>   2 3	fd	
	flags	
		⋮

## file table

## v-node

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

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

## process table

P1	fd	flags
		⋮
2		
3		
		⋮

## file table

## v-node

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

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



## process table

<b>P1</b>  2 3	fd	
	flags	⋮
		⋮

## 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);
```

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

## process table

P1	fd	
	flags	
		⋮
2		
3		
		⋮

P2	fd	
	flags	
		⋮
2		
3		
		⋮

## 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);
```

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

## process table

P1	fd	
	flags	
		⋮
2		
3		
		⋮

P2	fd	
	flags	
		⋮
2		
3		
		⋮

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

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

v-node info
i-node info
current file size

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

## process table

P1	fd	
	flags	
		⋮
2		
3		
		⋮

P2	fd	
	flags	
		⋮
2		
3		
		⋮

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

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

## v-node

v-node info
i-node info
current file size

v-node info
i-node info
current file size

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

## process table

P1	fd	
	flags	
		⋮
2		
3		
		⋮

P2	fd	
	flags	
		⋮
2		
3		
		⋮

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

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

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);
```

v-node info
i-node info
current file size

## process table

P1	fd	
	flags	
		⋮
2		
3		
		⋮

P2	fd	
	flags	
		⋮
2		
3		
		⋮

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

## file table

file status flags
current file offset
v-node pointer

file status flags
current file offset
v-node pointer

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);
```

v-node info
i-node info
current file size

## process table

P1	fd	
	flags	
		⋮
2		
3		
		⋮

P2	fd	
	flags	
		⋮
2		
3		
		⋮

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

## file table

file status flags
current file offset
v-node pointer

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);
```

v-node info
i-node info
current file size