

	READY	RUN	BLOCKED	NONRESIDENT
READY	_	1	-	5
RUN	2	_	3	-
BLOCKED	4	_	-	6

READY to RUN

occurs only if a process is allocated the CPU. This is the job of the scheduler or dispatcher

RUN to READY

can be caused by a time-quantum expiration (running process has reached the maximum allowable time for uninterrupted execution).

RUN to BLOCKED

can occur if there is a request from the operating systems process, or I/O or other kernel request.

BLOCKED to READY

occurs if the awaited event completes the event it is been waiting for (perhaps I/O completion).

READY to NONRESIDENT

occurs if memory is overcommitted, and a process is temporarily swapped out of memory.

BLOCKED to NONRESIDENT

- occurs if memory is overcommitted, and a process is temporarily swapped out of memory same just as ready to nonresident.

```
9 #include <stdio.h>
10
11 main ()
12 {
    int pid;
    pid = fork ();
    printf ("%d \n", pid);
16
17 }
18

warning: return type defamain.c:l4:l1: warning: implicit declar
6939
0
```