

**NAME**

wait — wait for process to die

**SYNOPSIS**

```
wait (&status)
struct { char lobyte; char hbyte; } status;
```

**DESCRIPTION**

*Wait* causes its caller to delay until one of its child processes terminates. If any child has died since the last *wait*, return is immediate; if there are no children, return is immediate with the error bit set (resp. with a value of `-1` returned). In the case of several children several *wait* calls are needed to learn of all the deaths.

If no error is indicated on return, the `r1` high byte, i.e. *status.hbyte*, contains the low byte of the child process `r0`, i.e. the argument of *exit*, when it terminated. The `r1` low byte, i.e. *status.lobyte*, contains the termination status of the process. See *signal(2)* for a list of termination statuses (signals); `0` status indicates normal termination. If the `0200` bit of the termination status is set, a core image of the process was produced by the system. Status `0177` is returned for a stopped process which has not terminated and can be restarted (see *ptrace(2)*).

On return, `r0` contains the process ID of the dead child. From C, the process ID of the child is the returned value.

**SEE ALSO**

*exit(2)*, *fork(2)*, *signal(2)*

**DIAGNOSTICS**

The error bit (c-bit) on if no children not previously waited for. From C, a returned value of `-1` indicates an error.

**ASSEMBLER**

```
(wait = 7.)
sys wait
(process id in r0)
(status in r1)
```