

## 实验报告 lab4-process

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### CPU 运行截图

```
hitsz_zzx@22X:~/hpc_practice/lab4-process/ostep$ ps -ef|grep cpu
hitsz_z+  20129  17591 99 14:39 pts/4    00:01:35 ./cpu A
hitsz_z+  20683  20334 99 14:40 pts/5    00:00:50 ./cpu B
hitsz_z+  21312   755  0 14:40 pts/0    00:00:00 /bin/sh -c "/home/hitsz_zzx/.vscode-server/bin/4849ca9bdf9666755e
```

### Pstree 运行截图

```
Child process CPU time: 16.333817 seconds
Parent process CPU time: 15.384868 seconds
Process tree:
systemd(1)
├── agetty(246)
├── agetty(250)
├── cron(143)
├── dbus-daemon(156)
├── init-systemd(Ub(2))
│   ├── SessionLeader(646)──Relay(648)(647)──cpptools+
│   │   └── sh(648)──+++
│   ├── SessionLeader(672)──Relay(674)(673)──node(674+
│   ├── SessionLeader(699)──Relay(707)(701)──node(707+
│   ├── init(7)──{init}(8)
│   ├── login(339)──bash(371)
│   └── {init-systemd(Ub}(9)
├── networkd-dispat(163)
├── rsyslogd(175)
│   ├── {rsyslogd}(223)
│   ├── {rsyslogd}(224)
│   └── {rsyslogd}(225)
├── snapd(187)
│   ├── {snapd}(213)
│   ├── {snapd}(214)
│   ├── {snapd}(215)
│   ├── {snapd}(218)
│   ├── {snapd}(219)
│   ├── {snapd}(228)
│   ├── {snapd}(232)
│   ├── {snapd}(233)
│   ├── {snapd}(234)
│   ├── {snapd}(270)
│   ├── {snapd}(271)
│   ├── {snapd}(272)
│   ├── {snapd}(313)
│   ├── {snapd}(314)
│   ├── {snapd}(316)
│   ├── {snapd}(332)
│   └── {snapd}(395)
├── snapfuse(73)
│   ├── {snapfuse}(74)
│   └── {snapfuse}(75)
├── snapfuse(78)
│   ├── {snapfuse}(80)
│   ├── {snapfuse}(81)
│   ├── {snapfuse}(299)
│   ├── {snapfuse}(301)
│   └── {snapfuse}(382)
├── snapfuse(85)
│   ├── {snapfuse}(86)
│   └── {snapfuse}(87)
├── snapfuse(92)
│   ├── {snapfuse}(93)
│   └── {snapfuse}(96)
├── snapfuse(98)
│   ├── {snapfuse}(100)
│   ├── {snapfuse}(101)
│   ├── {snapfuse}(394)
│   ├── {snapfuse}(3332)
│   ├── {snapfuse}(3333)
│   └── {snapfuse}(3403)
└── snapfuse(106)──{snapfuse}(107)
```

```

    {snapfuse}(108)
  -snapfuse(109)
    {snapfuse}(110)
    {snapfuse}(111)
    {snapfuse}(302)
    {snapfuse}(303)
  -snapfuse(3625)
    {snapfuse}(3626)
    {snapfuse}(3627)
    {snapfuse}(6229)
    {snapfuse}(6237)
  -subiquity-serve(235)
    python3.10(296)
      python3(421)
      {python3.10}(422)
      {python3.10}(6209)
      {python3.10}(6212)
      {python3.10}(6213)
      {python3.10}(6214)
  -systemd(365)
    (sd-pam)(366)
  -systemd-journal(39)
  -systemd-logind(205)
  -systemd-resolve(118)
  -systemd-udev(62)
  -unattended-upgr(273)
    {unattended-upgr}(300)
31.79user 0.03system 0:31.83elapsed 99%CPU (0avgtext+0avgdata 13976maxresident)k
0inputs+0outputs (0major+3374minor)pagefaults 0swaps

```

时间数据表格

	TIME
Real	31.73 99%CPU
User	31.63
sys	0.07

(User+sys)/Real 0.999