

# 作业第四题和第五题

## 第四题

- b 命令：打断点

```
(gdb) b 20
Breakpoint 1 at 0x720: file print.c, line 26.
(gdb) l
41         }
    ○ 42         return 0;
43     }
(gdb) b 40
Breakpoint 2 at 0x7a3: file print.c, line 40.
```

- c: 运行到下一个断点

```
Breakpoint 1, main () at print.c:26
26         printf("\n");
(gdb) c
Continuing.
    ○ * * * * *

Breakpoint 2, main () at print.c:40
40         printf("\n");
(gdb) c
```

- n: 单步调试

```
(gdb) n
* * * * *
28         for (int i = 1; i <= 10; i++) { // '0' 0 1 2 3 4 5 6 7 8 9
    ○ (gdb) n
29             for (int j = 0; j < i-1; j++) { // '0' 0 1 2 3 4 5 6 7 8 9
(gdb) n
30                 printf(" "); // 11-13-15-1
8-19
(gdb) █
```

- s: 单步调试并进入函数，源文件没函数OTZ

```
(gdb) s
putchar (c=32) at putchar.c:25
    ○ 25     putchar.c: No such file or directory.
(gdb) █
```

- info b: 显示所有断点

Num	Type	Disp	Enb	Address	What
1	breakpoint	keep	y	0x0000000000000720	in main at print.c:26
2	breakpoint	keep	y	0x00000000000007a3	in main at print.c:40

```
(gdb) █
```

- bt: 调用堆栈

```
The history is empty.
(gdb) bt
    ○ #0  main () at print.c:20
(gdb) █
```

- p 监视

- ```
(gdb) p
The history is empty.
(gdb) █
```

- delete : 删除所有断点

- ```
#0 main () at print.c:20
(gdb) delete
Delete all breakpoints? (y or n) y
(gdb) █
```

- r: 运行

- ```
(gdb) r
The program being debugged has been started already.
Start it from the beginning? (y or n) y
Starting program: /home/dcrsgk/day25/main
  * *          * *
  * * *        * * *
  * * * *      * * * *
* * * * * * * * * *
* * * * * * * * *
o  * * * * * * * *
  * * * * * * *
  * * * * * *
    * * * * *
      * * * *
        * * *
          * *
            *

[Inferior 1 (process 8133) exited normally]
(gdb) █
```

## 第五题

- 段错误

- ```
Program received signal SIGSEGV, Segmentation fault.
main () at print.c:4
4          a[1024]=3;
(gdb) █
```

- core文件: 它正常运行了 啊啊啊啊啊啊啊啊啊啊

- ```
dcrsgk@ubuntu:~/day25$ ./wrong
  * *          * *
  * * *        * * *
  * * * *      * * * *
* * * * * * * * * *
* * * * * * * * *
o  * * * * * * * *
  * * * * * * *
  * * * * * *
    * * * * *
      * * * *
        * * *
          * *
            *

- - - - -
```

unlimit: command not found

dcrsgk@ubuntu:~/day25\$ ulimit -a

|                      |                 |           |
|----------------------|-----------------|-----------|
| core file size       | (blocks, -c)    | unlimited |
| data seg size        | (kbytes, -d)    | unlimited |
| scheduling priority  | (-e)            | 0         |
| file size            | (blocks, -f)    | unlimited |
| pending signals      | (-i)            | 7565      |
| max locked memory    | (kbytes, -l)    | 16384     |
| max memory size      | (kbytes, -m)    | unlimited |
| open files           | (-n)            | 1024      |
| pipe size            | (512 bytes, -p) | 8         |
| POSIX message queues | (bytes, -q)     | 819200    |
| real-time priority   | (-r)            | 0         |
| stack size           | (kbytes, -s)    | 8192      |
| cpu time             | (seconds, -t)   | unlimited |
| max user processes   | (-u)            | 7565      |
| virtual memory       | (kbytes, -v)    | unlimited |
| file locks           | (-x)            | unlimited |