C语言综合研究与高强度程序设计训练7

写一个程序,进行如下工作:

- (1) 从内存偏移地址2000h处开始,读取偏移地址n处的整型数据d,按照如下格式打印偏移地址n->数据d
- (2) 将数据d当作新的偏移地址n, 读取偏移地址n处的整型数据d按照上面的格式打印。直到偏移地址为xff为, 或用户从键盘输入字符"q"

1

• a.c

```
1
    int n = 0x2000;
2
   int c;
3
    char ch:
    main() {
         while (n != 0 \times ffff \&\& c != 'q') \{
5
              printf("offset address %xh -> data %d\n", n, *(int *)n);
6
7
              if (kbhit()) {
8
                  ch = getch();
9
                  if (ch == 'q')
10
                      break;
11
12
              sleep(1);
13
              n++;
14
         }
15
```

结果

```
C:\>\SRC\SEUEN\A.EXE

offset address 2000h -> data >

stop input q: e

input n: 3

offset address 2003h -> data *

stop input q:
input n: q

offset address 2006h -> data ©

stop input q:
input n: q

offset address 2006h -> data ©

stop input q:
input n: q
```

修正

```
C:\>\SRC\07_SEUEN\a.exe

offset address 2000h -> data 20562

offset address 2001h -> data -6064

offset address 2002h -> data 6632

offset address 2003h -> data 4633

offset address 2004h -> data 7698

offset address 2005h -> data -18402

offset address 2006h -> data -17736

C:\>
```

• b.c

```
int n = 0x2000;
2
     int c;
3
     int t;
     main() {
4
5
         while (n != 0xffff \&\& c != 'q') {
6
              printf("offset address %xh -> data %c\n", n, *(int *)n);
              printf("stop input q: ");
8
9
              scanf("%c", &c);
10
              printf("\ninput n: ");
11
12
              scanf("%x", &t);
13
             t += n;
             n += *(int *)t;
14
15
         }
16
```

结果

```
C:\>\SRC\SEVEN\B.EXE

offset address 2000h -> data >
stop input q: 5

input n: 5

offset address 849h -> data ©
stop input q:
input n: q

offset address 76fh -> data ×
stop input q:
input n: q
```

- 修正
- code

```
int n = 0x2000;
 2
     int t;
3
     char ch;
 4
     main() {
 5
         while (n != 0xffff && ch != 'q') {
 6
             printf("offset address %xh -> data %x\n", n, *(int *)n);
 7
             if (kbhit()) {
8
                 ch = getch();
9
             }
10
             sleep(1);
11
             n = *(int *)n;
         }
12
13
```

```
C:\>\SRC\07_SEVEN\B.EXE

offset address 2000h -> data 5052

offset address 5052h -> data e6e

offset address e6eh -> data 8bf2

offset address 8bf2h -> data 478a

offset address 478ah -> data 274

offset address 274h -> data 0

offset address 0h -> data 0
```