

Pass 1 in C

```
typedef struct {
    char lable[40];
    short addr;
} TabRecType;

TabRecType SymTab[100];
char line[100];
int LC = 0;
FILE *fp;
/*=====*/
void PrintTab(int len)
{
    int i;
    printf("%-10s %s\n", "Lable", "Address");
    for (i=0; i<len; i++)
        printf("%-10s %d\n", SymTab[i].lable, SymTab[i].addr);
}
/*=====*/
```

Pass 1 in C

```
main()
{
    char *inxp, s1[10], s2[10];
    int tabInx = 0;
    fp = fopen ("Test.asm", "r");
    while (1) {
        fgets (line, 100, fp);
        if (inxp = strchr (line, ':')) {
            (*inxp) = '\0';
            sscanf(line, "%s", SymTab[tabInx].lable);
            SymTab[tabInx].addr = LC;
            tabInx++;
        }
        else {
            sscanf(line, "%s%s", s1, s2);
            if (!strcmp(s1,"ORG"))
                LC = atoi(s2) - 1;
            else if (!strcmp(s1,"END"))
                break;
        }
        LC++;
    }
    PrintTab(tabInx);
}
```