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LCC - T - 16

stack.h  
stack.c  
modo de stacks  
gcc -c stack.c → stack.o

```
Stack.h
typedef struct sStack
{
    int S[MAXSTACK];
    int sp;
} stack;

stack push(stack s, int elem);
stack pop(stack s);
```

```
Stack.c
#include "stack.h"

stack push (stack s, int elem)
{
    s.S[sp] = elem;
    sp++;
    return s;
}

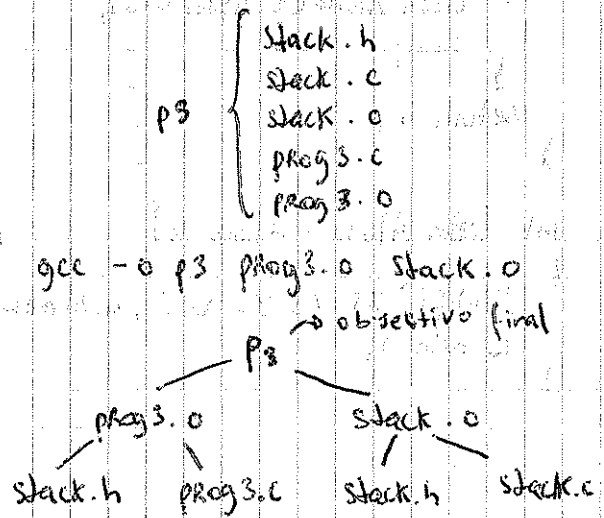
stack pop (stack s)
{
    sp--;
    return s;
}
```

```
prog3.c
#include <stdio.h>
#include "stack.h"

int main ()
{
    stack s1, s2 = {{3, 5, 7}, 3}, s3;
    stack ls[10] = {{{1, 2}, 2}, {{3, 4, 6}, 3}};

    s1 = push(s2, 1);
    s1 = push(push(s1, 3), 5);

    s3 = pop(s2);
    return 1;
}
```



```
make file
p3 : prog3.o stack.o
<TAB> gcc -o p3 prog3.o stack.o

prog3.o : prog3.c stack.h
<TAB> gcc -c prog3.c

stack.o : stack.h stack.c
<TAB> gcc -c stack.c
```

\$ make ↴

typedef <def. > nome\_tpo

```
typedef struct sAluno
{
    char numero [8];
    char nome [60];
    char nome [40];
} Aluno;
Turma [200];
```

~~typedef Aluno Turma [200];~~

```
typedef struct sTurma
{
    Aluno lista [200];
    int nAlunos;
} Turma;
```

```
int listaTurma (Turma t)
{
    int i = 0;
    while (i < t.nAlunos)
    {
        listaAluno (t.lista [i]);
        i++;
    }
    return i;
}
```

```
int listaAluno (Aluno a)
{
    printf (" %s %s %s \n", a.numero, a.nome, a.curso);
    return 1;
}
```

```
int main ()
{
    Alunos a1, a2 = {"222", "Mauricio", "RI"};
    Turma t1;
    Turma t2 = {{a1, a2}, 2};
}
```