

Algorithm for Pass 1 of a Linker Loader

Pass 1:

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begin
get PROGADDR from operating system
set CSADDR to PROGADDR {for first control section}
while not end of input do
  begin
    read next input record {Header record for control section}
    set CSLTH to control section length
    search ESTAB for control section name
    if found then
      set error flag {duplicate external symbol}
    else
      enter control section name into ESTAB with value CSADDR
    while record type != 'E' do
      begin
        read next input record
        if record type = 'D' then
          for each symbol in the record do
            begin
              search ESTAB for symbol name
              if found then
                set error flag {duplicate external symbol}
              else
                enter symbol into ESTAB with value
                  (CSADDR + indicated address)
              end {for}
            end {while != 'E'}
          add CSLTH to CSADDR {starting address for next control section}
        end {while not EOF}
      end {Pass 1}
```
