Exercise 8
Pointer, C
(23.01.2026)

Review

1. The instruction `USE mymod, b => a` includes the module and does also:
   - ☐ The name `a` from the module becomes externally visible as `b` to calling procedures.
   - ☐ The name `b` from the module becomes externally visible as `a` to calling procedures.
   - ☐ Nothing, it's an invalid assignment, (`=>` instead of `=`).
2. Which `OPEN` statement is wrong?
   - ☐ `OPEN (42)`
   - ☐ `OPEN (2,FILE='a.dat',ERR=100)`
   - ☐ `OPEN (1,ACTION=WRITE)`

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1. Task *Pointer* (2 P)
In the lecture an example for a pointer assignment was given:

```
REAL, TARGET :: x, y       ! attr. TARGET required
REAL, POINTER :: p, q
y = 0.75
p => x         ! associates p with x
p = y          ! normal assignment (values) of y to p
WRITE (*,*) x ! gives 0.75
q => p         ! x, p, q are now the same
```

Where does `q` point to, when `p` is assigned to a new object, e.g., `p => y`?

2. Task *Access to C functions* (4 P)
Write a Fortran program that accesses the following C function and passes the string "Hello world!":

```
#include <stdio.h>
#include <string.h>
c_output_(char *text) {
 printf("%s\n",text) ;
}
```