

Input/output in Fortran

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I/O commands

- print simple output to terminal
- write output to terminal of file ('unit')
- read input from terminal or file
- open, close for files and streams

Array printing

- `print *,A` prints whole array, column-major
- Implicit do loops:

```
print *,( A(i,i),i=1,n)
```

Can also be nested.

Formats

- Fine control of input/output.
- Direct use in print statement:

```
print '(a6,3f5.3)', "Result", x, y, z
```

- Format statement:

```
print 10, "result:", x, y, z  
10 format('(a6,3f5.3)')
```

Format specifiers

- `an` specifies a string of n characters. If the actual string is longer, it is truncated in the output.
- `in` specifies an integer of up to n digits. If the actual number takes more digits, it is rendered with asterisks.
- `fm.n` specifies a fixed point representation of a floating point number, with m total positions (including the decimal point) and n digits in the fractional part.
- `em.n` Exponent representation.

Putting a number in front of a single specifier indicates that it is to be repeated.