Tecniche di programmazione in chimica computazionale

Derived types & pointers

Emanuele Coccia

Dipartimento di Scienze Chimiche e Farmaceutiche

Derived type

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components

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- Example example1.f90

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- Example example2.f90

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- Advantages:
  - Dynamic management of variables
  - No *a priori* knowledge of the size problem
  - Flexibility in producing a more efficient program (with caveats)

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- Example p2.f90

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- Example p3.f90

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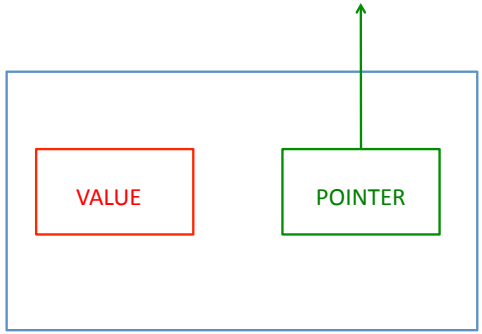
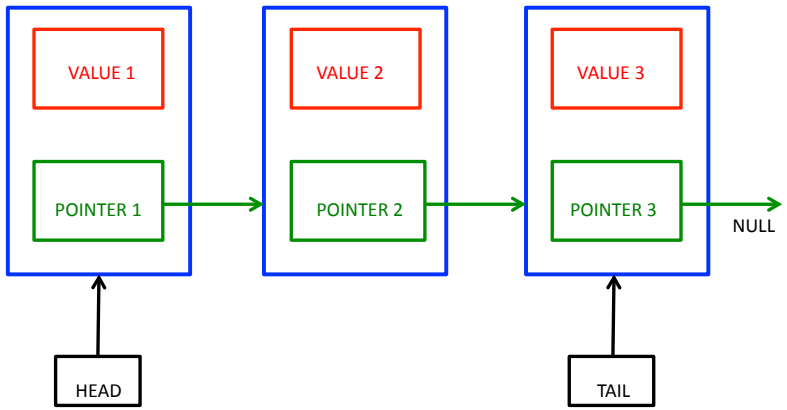
- Example p4.f90
- Use *allocate(pointer)* to create a new data object

Linked list

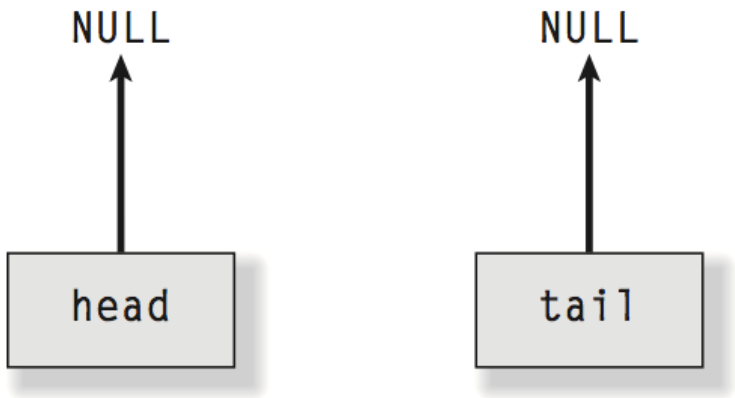
- Derived data type: ordinary variable (integer, real, etc.) + pointer



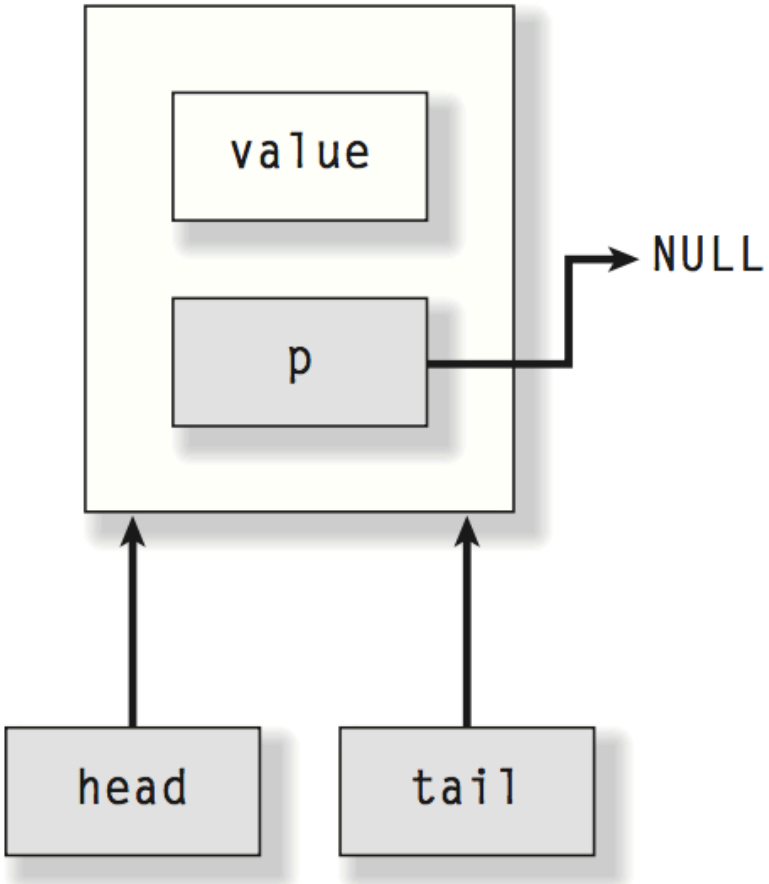
- Linked list



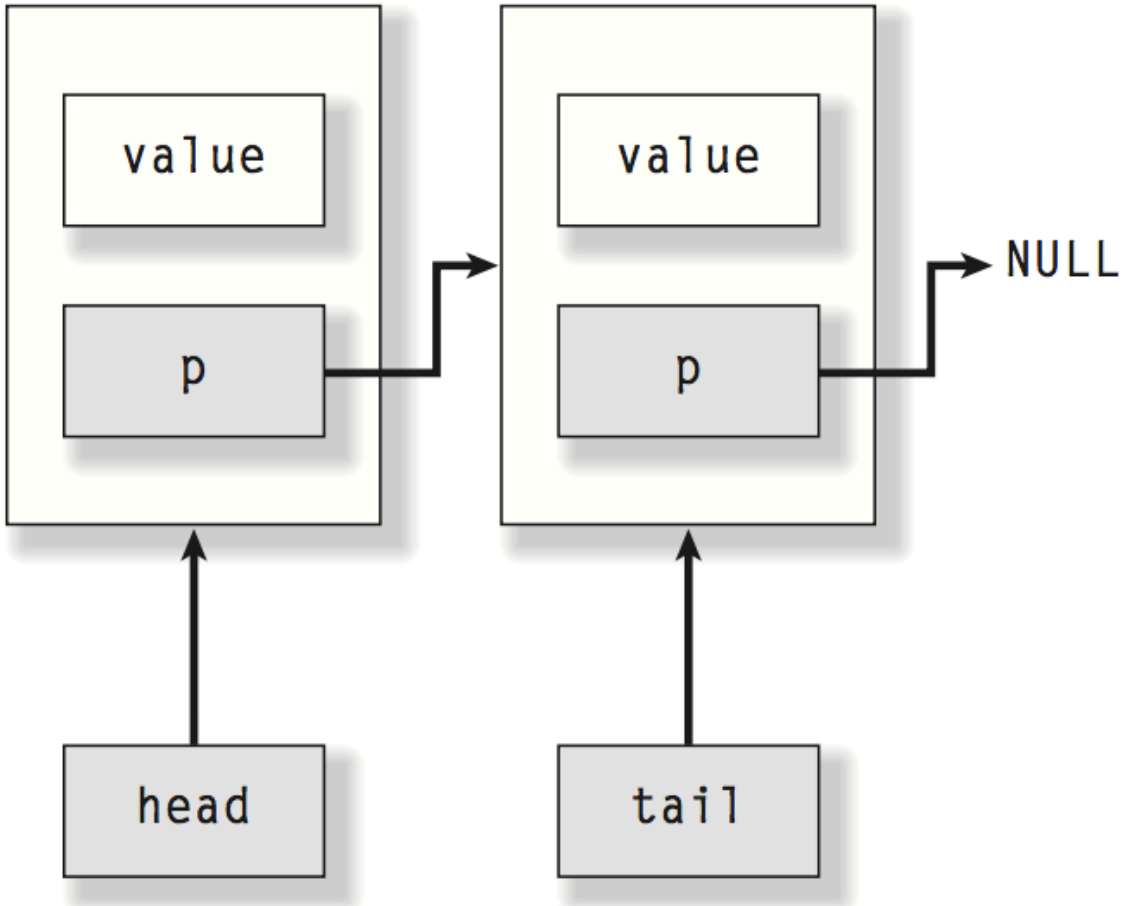
Linked list: first step



Linked list: second step



Linked list: third step



Example list.f90