

## Operator DEFI\_LIST\_ENTI

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### 1 Goal

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To create a list of strictly increasing entreties.

The list can be given “in extenso” by the user, or, it can be formed from under lists defined in “constant step”.

The list can be made up by extraction of the sequence numbers of a structure of data result.

Product a structure of data of the type `listis`.

## 2 Syntax

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```
Li [listis] = DEFI_LIST_ENTI

(
  ◆ APERTURERATION= / 'CHALLENGE',
  [DEFECT]
      / 'NUMÉRIQUE_ORDRE',

  ◆ INFORMATION = / 1 ,
  [DEFECT]
      / 2 ,

  ◆ TITLE = title , [l_Kn]

# If OPERATION = 'CHALLENGE':
  / ◆ VALLEYE = read , [l_I]

  / ◆ OFGOAL = deb. , [I]

  / ◆ INTERVALLE = (_F ( ◆ JUSQU_A = yew, [I]
                        ◆ / NAMEBRE = in , [I]
                        / NOT = ipas, [I]
                        ),),

# If OPERATION = 'NUMÉRIQUE_ORDRE':
  ◆ RESULT = resu, [result]

  ◆ PARAMETER = resu, [KN]

  ◆ I NTERVALLE = (_F (
    ◆ VALE = (val1, val2), [R]
    ),),

)
```

## 3 Operands

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### 3.1 Definition of a list of entreties

#### 3.1.1 Operand VALE

◆ VALE = lily

List of the entreties which will form the structure of data `listis` result, one can provide any list Python.

#### 3.1.2 Operand BEGINNING

◆ BEGINNING =

`deb.` : first entrety of the list to be built.

#### 3.1.3 Keyword INTERVAL

◆ INTERVAL

Keyword factor whose each occurrence makes it possible to define an interval at constant step.

### 3.1.3.1 Operand `JUSQU_A`

◆ `JUSQU_A = yew`

`yew` is the whole end of the interval to be cut out with a constant step.

### 3.1.3.2 Operand `NOT`

◆ `/ NOT = ipas`

Pas de division interval.

### 3.1.3.3 Operand `NUMBER`

`/ NUMBER = in`

Many steps which one wants in the interval.

## 3.2 Extraction of sequence numbers

This operation makes it possible to recover in a structure of data `result` (`evol_noli` exit of `STAT/DYNA_NON_LINE` for example) sequence numbers corresponding to certain criteria.

The list of the sequence numbers thus obtained can then be used in all the orders having the keyword `LIST_ORDRE`.

For the moment, the only programmed criterion is the extraction of a parameter in a given interval.

### 3.2.1.1 Operand `PARAMETER`

Name of the structural parameter of data `result` which one wants to extract the value.

### 3.2.1.2 Keyword factor `INTERVALE`

One defines as many occurrences of the keyword factor `INTERVALE` that one wishes intervals of research. Research is made on the union of these intervals.

`VALE = (val1, val2)`

Definition of terminals of each interval to which of which to belong the parameter to be extracted (terminals understood).

## 3.3 Operand `INFORMATION`

◇ `INFORMATION = I`

Indicate the level of impression of the results of the operator:

1 : no impression,

2 : impression of the list of entreties created.

## 3.4 Operand `TITLE`

◇ `TITLE = title`

Title attached to the concept produced by this operator [U4.03.01].

## 4 Remarks

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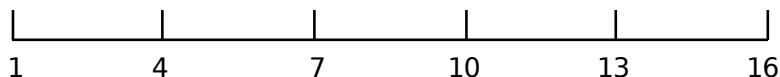
- it is checked that the list is increasing,
- caution: the structure of data of the type `listis` cannot be used behind a keyword expecting one `l_I` (continuation of entireties written between brackets).

## 5 Examples

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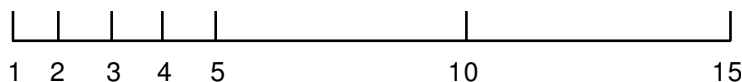
### 5.1 Case OPERATION = 'CHALLENGE'

To build the list of entireties to constant step:



```
listi = DEFI_LIST_ENTI ( BEGINNING = 1,  
                        INTERVAL = (_F ( JUSQU_A = 16,  
                                         NOT = 3 ),),  
                        )
```

To build the list of entireties with two values different from the step:



```
listi = DEFI_LIST_ENTI ( BEGINNING = 1,  
                        INTERVAL = (_F ( JUSQU_A = 5,  
                                         NOT = 1, ),  
                                     _F ( JUSQU_A = 15,  
                                         NOT = 5, ),),  
                        )
```

or

```
listi = DEFI_LIST_ENTI ( BEGINNING = 1,  
                        INTERVAL = (_F ( JUSQU_A = 5,  
                                         NUMBER = 4, ),  
                                     _F ( JUSQU_A = 15,  
                                         NUMBER = 2, ),),  
                        )
```

or, from object does not import lists Python:

```
listi = DEFI_LIST_ENTI ( VALE = arranges (10) ,)
```

### 5.2 Case OPERATION = 'NUMÉRIQUE\_ORDRE'

```
lnuor = DEFI_LIST_ENTI (OPERATION=' NUMÉRIQUE_ORDRE',  
                        RESULTAT=DEPLTRAN,  
                        PARAMETRE=' INST',  
                        INTERVALLE= (  
                            _F (VALE= (1.36, 1.37)),  
                            _F (VALE= (1.45, 1.46)),  
                        ),)
```

lnuor the list of the sequence numbers will contain of which the value of the moment (parameter INST) is in Lbe intervals given S.