Part Class Documentation

Source File: 'MemCell.h'
Namespace: ca
Class Header: `class Part : public MemCell`

Overview

The *Part* concrete *MemCell* class represents a fixed non-extendable subword (*MemCell*) of an existing word.

Constructors

- `Part()` (default constructor)
  - **Purpose**: Creates a null reference.
- `Part(const Part& obj)` (copy constructor)
  - **Purpose**: Performs a deep copy of *obj* if it does not have a reference and *obj* has a reference.
  - **Parameter(s)**:
    - *obj*: Constant *Part* reference object.
- `Part(const MemCell& obj)`
  - **Purpose**: Sets *obj* as the reference for the part and designates the full word as the subword.
  - **Parameter(s)**:
    - *obj*: Constant *MemCell* reference object.
- `Part(const MemCell& obj,size_t x,size_t y)`
  - **Purpose**: Sets *obj* as the reference for the part and makes the range [min(x,y),max(x,y)].
  - **Parameter(s)**:
    - *obj*: Constant *MemCell* reference object.
    - x: An index
    - y: An index

Destructor

- `~Part()` [virtual]
  - **Purpose**: It does nothing.

Assignment Operator

- `operator=(const Part& rhs)`
  - **Purpose**: Performs a deep copy of *obj* if it does not have a reference and *obj* has a reference.
  - **Parameter(s)**:
    - *rhs*: Constant *Part* reference object.
  - **Return**: `*this`.

Member Functions

- `begin() const`
  - **Purpose**: Gets the lower endpoint index of the subword.
  - **Return**: An index.
- `end() const`
  - **Purpose**: Gets the upper endpoint index of the subword.
  - **Return**: An index.
- `range(size_t x,size_t y = 0)`
  - **Purpose**: Sets the endpoint indices of th subword if the indices are valid.
  - **Parameter(s)**:
    - x: An index.
    - y: An index.