Word Class Documentation

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

Overview

The *Word* concrete class represents a binary word.

Constructors

- `Word()` (default constructor)
  - **Purpose**: Constructs a 8-bit word of zeroes.
- `Word(const Word& obj)` (copy constructor)
  - **Purpose**: Performs a deep copy of *obj* that excludes its attachment
  - **Parameter(s)**:
    - *obj*: Constant *Word* reference object.
- `Word(size_t sz)`
  - **Purpose**: Constructs a *sz*-bit word of zeroes if *size* is greater than 0; otherwise, a 8-bit word.
  - **Parameter(s)**:
    - *sz*: Number of bits.
- `Word(string str)`
  - **Purpose**: Converts a binary string *str* into a word if *str* is a binary string; otherwise, construct a 1-bit word.
  - **Parameter(s)**:
    - *str*: A binary string.

Destructor

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

Assignment Operator

- `operator=(const Word& rhs)`
  - **Purpose**: Performs a deep copy of *rhs* that excludes its attachment.
  - **Parameter(s)**:
    - *rhs*: Constant *Word* reference object.
  - **Return**: `*this`.

Non-Member Functions

- `operator+(const Word& lhs,const Word& rhs)`
  - **Purpose**: Constructs a word that is concatenation of *rhs* appended to *lhs*.
  - **Parameter(s)**:
    - *lhs*: A constant *Word* reference object.
    - *rhs*: A constant *Word* reference object.
  - **Return**: *Word* object.