

# Pair Class Documentation

Source File: Utils.h  
Namespace: aa  
Class Header: template <class V> class Pair : public Object

## Overview

The *Pair* class is a container class for an unsigned integer key and a generic value object.

## Constructors

- `Pair()` (default constructor)
  - **Purpose:** Initializes the key to 0 and value to the default value of the generic type.
- `Pair(const Pair<V>& obj)` (copy constructor)
  - **Purpose:** Constructs a deep copy of *obj*.
  - **Parameter(s):**
    - *obj*: Constant *Pair* reference object.
- `Pair(size_t key, const V& value)`
  - **Purpose:** Initializes the key to *key* and the value to *value*
  - **Parameter(s):**
    - *key*: An unsigned integer.
    - *value*: A generic type object.

## Destructor

- `~Pair()`
  - **Purpose:** Does nothing.

## Assignment Operators

- `operator=(const Pair<T>& rhs)`
  - **Purpose:** Constructs a deep copy of *rhs*.
  - **Parameter(s):**
    - *rhs*: Constant *Pair* reference object.
  - **Return:** `*this`.

## Methods

- `Key() const`  
`Key()`
  - **Purpose:** Gets the key of the pair.
  - **Return:** The key.
- `Value() const`  
`Value()`
  - **Purpose:** Gets the value of the pair.
  - **Return:** The value.
- `toString() const`
  - **Purpose:** Provides a string representation of the *Pair* object.
  - **Return:** A string representation of the value.