Class WAVLTree.WAVLNode

java.lang.Object
    WAVLTree.WAVLNode

Enclosing class:

WAVLTree

```
public static class WAVLTree.WAVLNode
extends java.lang.Object
```

public class WAVLNode

Constructor Summary

Constructors

Constructor and Description
WAVLNode(int key, java.lang.String value) create leaf

Method Summary

All Methods Static Methods Instance Methods Concrete Methods

Modifier and Type	Method and Description
int	**getKey**()
WAVLTree.WAVLNode	**getLeft**()
WAVLTree.WAVLNode	**getParent**()
int	**getRank**()
static int	**getRankDiff**(**WAVLTree.WAVLNode** parent, **WAVLTree.WAVLNode** child)
WAVLTree.WAVLNode	**getRight**()
int	**getSubtreeSize**()
int	**getSubTreeSize**()
java.lang.String	**getValue**()
boolean	**isInnerNode**()

boolean	**isLeaf**()
WAVLTree.SIDE	**isUnary**()
void	**setLeft**(**WAVLTree.WAVLNode** left)
void	**setParent**(**WAVLTree.WAVLNode** parent)
void	**setRank**(int rank)
void	**setRight**(**WAVLTree.WAVLNode** right)
void	**setSubTreeSize**(int subTreeSize)
void	**setValue**(java.lang.String value)
java.lang.String	**toString**()

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, wait, wait, wait

Constructor Detail

WAVLNode

```
public WAVLNode(int key,
                java.lang.String value)
```

create leaf

Parameters:

key -

value -

Method Detail

isUnary

```
public WAVLTree.SIDE isUnary()
```

Returns:

is unary node

isLeaf

```
public boolean isLeaf()
```

Returns:

if node is leaf

getKey

```
public int getKey()
```

Returns:

key, if the node is external node return -1

getValue

```
public java.lang.String getValue()
```

Returns:

the info of the nod. if the node is external node return null

getLeft

```
public WAVLTree.WAVLNode getLeft()
```

Returns:

child left

getRight

```
public WAVLTree.WAVLNode getRight()
```

Returns:

child right

getRank

```
public int getRank()
```

Returns:

rank

setRank

```
public void setRank(int rank)
```

Parameters:

rank -

getParent

```
public WAVLTree.WAVLNode getParent()
```

Returns:

parent

setParent

```
public void setParent(WAVLTree.WAVLNode parent)
```

Parameters:

parent -

getSubTreeSize

```
public int getSubTreeSize()
```

Returns:

Sub Tree Size

setSubTreeSize

```
public void setSubTreeSize(int subTreeSize)
```

Parameters:

subTreeSize -

setValue

```
public void setValue(java.lang.String value)
```

Parameters:

value -

setLeft

```
public void setLeft(WAVLTree.WAVLNode left)
```

Parameters:

left -

setRight

```
public void setRight(WAVLTree.WAVLNode right)
```

Parameters:

right -

isInnerNode

```
public boolean isInnerNode()
```

Returns:

true if the node is internal , otherwise false O(1)

getSubtreeSize

```
public int getSubtreeSize()
```

Returns:

the number of internal mode in the sub-tree O(1)

toString

```
public java.lang.String toString()
```

Overrides:

toString in class java.lang.Object

getRankDiff

```
public static int getRankDiff(WAVLTree.WAVLNode parent,
                              WAVLTree.WAVLNode child)
```

Parameters:

parent -

child -

Returns:

The rank diff between the node and its child