stamp.math

Class FloatLite6

```
java.lang.Object
  |
  +--stamp.math.FloatLite6
```

public class **FloatLite6**
extends Object

The FloatLite6 library can perform addition and subtraction of fixed decimal point numbers up to 6 decimal places. Comparison and equality methods are included.

FloatLite6 objects support values from -32768.999999 to 32767.999999.

Constructor Summary

FloatLite6(char[] num) Constructor when provided the value in a char array.
FloatLite6(FloatLite6 other) Constructor when provided the value of another FloatLite object.
FloatLite6(String num) Constructor when provided the value as a string.
FloatLite6(StringBuffer num) Constructor when provided the value in a StringBuffer object.

Method Summary

int	**absCompare**(FloatLite6 other) Compare two FloatLite objects.
FloatLite6	**add**(FloatLite6 other) Add a FloatLite object to the current one.
FloatLite6	**add**(int num) Add an integer to the current FloatLite object.
FloatLite6	**add**(String num) Add a String object to current FloatLite object.
int	**compare**(FloatLite6 other)

	Compare two FloatLite objects.
boolean	**equals**(FloatLite6 other) Test equality with another FloatLite object.
int	**getInteger**() Find the whole number portion of the object.
char[]	**getNumerator**() Find the numerator of the fraction element.
char	**getNumerator**(int digit) Find the numerator of the fraction element.
boolean	**getSign**() Get the sign of the FloatLite6 object.
protected void	**setInteger**(int newInt) Protected method to set the whole number portion of the object available to class and package members.
protected void	**setNumerator**(char[] newInt) Protected method to set the numerator of the fraction element available to class and package members.
protected void	**setNumerator**(int digit, char newval) Protected method to set the numerator element available to class and package members.
void	**setValue**(char[] num) Assign a value from a char array that contains a valid float number.
void	**setValue**(FloatLite6 other) Assign a value from a FloatLite object to another FloatLite object.
void	**setValue**(int num) Assign a value from an integer.
void	**setValue**(String num) Assign a value from a string object that contains a valid float number.
void	**setValue**(StringBuffer sbnum) Assign a value from a stringbuffer object that contains a valid float number.
FloatLite6	**subtract**(FloatLite6 other) Subtract a FloatLite object from the current one.
FloatLite6	**subtract**(int num) Subtract an int from a FloatLite6 object.
FloatLite6	**subtract**(String num) Subtract a string object from a FloatLite6 object.
String	**toString**() Return the current FloatLite object as a string.
void	**zero**() Zeros the value of the FloatLite object.

Methods inherited from class java.lang.Object
equals

Constructor Detail

FloatLite6

```
public FloatLite6(String num)
```

Constructor when provided the value as a string.

Parameters:
num - the string representation of the fixed point number

FloatLite6

```
public FloatLite6(StringBuffer num)
```

Constructor when provided the value in a StringBuffer object.

Parameters:
num - the StringBuffer value of the fixed point number

FloatLite6

```
public FloatLite6(char[] num)
```

Constructor when provided the value in a char array.

Parameters:
num - the char array value of the fixed point number

FloatLite6

```
public FloatLite6(FloatLite6 other)
```

Constructor when provided the value of another FloatLite object.

Method Detail

zero

```
public void zero()
```

Zeros the value of the FloatLite object.

---

add

```
public FloatLite6 add(FloatLite6 other)
```

Add a FloatLite object to the current one. The resulting value is held in the calling object.

---

add

```
public FloatLite6 add(int num)
```

Add an integer to the current FloatLite object. The resulting value is held in the calling object.

---

add

```
public FloatLite6 add(String num)
```

Add a String object to current FloatLite object. The resulting value is held in the calling object.

---

subtract

```
public FloatLite6 subtract(FloatLite6 other)
```

Subtract a FloatLite object from the current one. The resulting value is held in the calling object.

---

subtract

```
public FloatLite6 subtract(int num)
```

Subtract an int from a FloatLite6 object. The resulting value is held in the calling object.

---

subtract

```
public FloatLite6 subtract(String num)
```

Subtract a string object from a FloatLite6 object. The resulting value is held in the calling object

---

equals

```
public boolean equals(FloatLite6 other)
```

Test equality with another FloatLite object.

Returns:
boolean [i]true[/i] if objects hold same value [i]false[/i] otherwise

---

compare

```
public int compare(FloatLite6 other)
```

Compare two FloatLite objects.

Returns:
0 if the objects are equal; -1 if other object is greater than current object; 1 if current object is greater

---

absCompare

```
public int absCompare(FloatLite6 other)
```

Compare two FloatLite objects.

Returns:
0 if the objects are equal; -1 if other object is greater than current object; 1 if current object is greater

---

setValue

```
public void setValue(FloatLite6 other)
```

Assign a value from a FloatLite object to another FloatLite object.

---

setValue

```
public void setValue(StringBuffer sbnum)
```

Assign a value from a stringbuffer object that contains a valid float number.

---

setValue

```
public void setValue(String num)
```

Assign a value from a string object that contains a valid float number.

---

setValue

```
public void setValue(char[] num)
```

Assign a value from a char array that contains a valid float number.

---

setValue

```
public void setValue(int num)
```

Assign a value from an integer.

---

toString

```
public String toString()
```

Return the current FloatLite object as a string.

---

getSign

```
public boolean getSign()
```

Get the sign of the FloatLite6 object.

Returns:
boolean [i]true[/i] if positive, [i]false[/i] if negative

---

getNumerator

```
public char[] getNumerator()
```

Find the numerator of the fraction element.

Returns:
integer representation of numerator value -- denominator is always 10000

---

getNumerator

```
public char getNumerator(int digit)
```

Find the numerator of the fraction element.

Returns:
integer representation of numerator value -- denominator is always 10000

---

getInteger

```
public int getInteger()
```

Find the whole number portion of the object.

Returns:
integer representation of whole number value

---

setInteger

```
protected void setInteger(int newInt)
```

Protected method to set the whole number portion of the object available to class and package members.

---

setNumerator

```
protected void setNumerator(char[] newInt)
```

Protected method to set the numerator of the fraction element available to class and package members.

---

setNumerator

```
protected void setNumerator(int digit,
                            char newval)
```

Protected method to set the numerator element available to class and package members.
