| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ByteArrayInputStream.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/io/BufferedWriter.html)   [**NEXT CLASS**](http://docs.google.com/java/io/ByteArrayOutputStream.html) | [**FRAMES**](http://docs.google.com/index.html?java/io/ByteArrayInputStream.html)    [**NO FRAMES**](http://docs.google.com/ByteArrayInputStream.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#4d34og8) | [CONSTR](#lnxbz9) | [METHOD](#44sinio) |

## **java.io**

Class ByteArrayInputStream

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.io.InputStream](http://docs.google.com/java/io/InputStream.html)  
 **java.io.ByteArrayInputStream**

**All Implemented Interfaces:** [Closeable](http://docs.google.com/java/io/Closeable.html)

public class **ByteArrayInputStream**extends [InputStream](http://docs.google.com/java/io/InputStream.html)

A ByteArrayInputStream contains an internal buffer that contains bytes that may be read from the stream. An internal counter keeps track of the next byte to be supplied by the read method.

Closing a ByteArrayInputStream has no effect. The methods in this class can be called after the stream has been closed without generating an IOException.

**Since:** JDK1.0 **See Also:**[StringBufferInputStream](http://docs.google.com/java/io/StringBufferInputStream.html)

| **Field Summary** | |
| --- | --- |
| protected  byte[] | [**buf**](http://docs.google.com/java/io/ByteArrayInputStream.html#buf)            An array of bytes that was provided by the creator of the stream. |
| protected  int | [**count**](http://docs.google.com/java/io/ByteArrayInputStream.html#count)            The index one greater than the last valid character in the input stream buffer. |
| protected  int | [**mark**](http://docs.google.com/java/io/ByteArrayInputStream.html#mark)            The currently marked position in the stream. |
| protected  int | [**pos**](http://docs.google.com/java/io/ByteArrayInputStream.html#pos)            The index of the next character to read from the input stream buffer. |

| **Constructor Summary** | |
| --- | --- |
| [**ByteArrayInputStream**](http://docs.google.com/java/io/ByteArrayInputStream.html#ByteArrayInputStream(byte%5B%5D))(byte[] buf)            Creates a ByteArrayInputStream so that it uses buf as its buffer array. |
| [**ByteArrayInputStream**](http://docs.google.com/java/io/ByteArrayInputStream.html#ByteArrayInputStream(byte%5B%5D,%20int,%20int))(byte[] buf, int offset, int length)            Creates ByteArrayInputStream that uses buf as its buffer array. |

| **Method Summary** | |
| --- | --- |
| int | [**available**](http://docs.google.com/java/io/ByteArrayInputStream.html#available())()            Returns the number of remaining bytes that can be read (or skipped over) from this input stream. |
| void | [**close**](http://docs.google.com/java/io/ByteArrayInputStream.html#close())()            Closing a ByteArrayInputStream has no effect. |
| void | [**mark**](http://docs.google.com/java/io/ByteArrayInputStream.html#mark(int))(int readAheadLimit)            Set the current marked position in the stream. |
| boolean | [**markSupported**](http://docs.google.com/java/io/ByteArrayInputStream.html#markSupported())()            Tests if this InputStream supports mark/reset. |
| int | [**read**](http://docs.google.com/java/io/ByteArrayInputStream.html#read())()            Reads the next byte of data from this input stream. |
| int | [**read**](http://docs.google.com/java/io/ByteArrayInputStream.html#read(byte%5B%5D,%20int,%20int))(byte[] b, int off, int len)            Reads up to len bytes of data into an array of bytes from this input stream. |
| void | [**reset**](http://docs.google.com/java/io/ByteArrayInputStream.html#reset())()            Resets the buffer to the marked position. |
| long | [**skip**](http://docs.google.com/java/io/ByteArrayInputStream.html#skip(long))(long n)            Skips n bytes of input from this input stream. |

| **Methods inherited from class java.io.**[**InputStream**](http://docs.google.com/java/io/InputStream.html) |
| --- |
| [read](http://docs.google.com/java/io/InputStream.html#read(byte%5B%5D)) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Field Detail** |
| --- |

### buf

protected byte[] **buf**

An array of bytes that was provided by the creator of the stream. Elements buf[0] through buf[count-1] are the only bytes that can ever be read from the stream; element buf[pos] is the next byte to be read.

### pos

protected int **pos**

The index of the next character to read from the input stream buffer. This value should always be nonnegative and not larger than the value of count. The next byte to be read from the input stream buffer will be buf[pos].

### mark

protected int **mark**

The currently marked position in the stream. ByteArrayInputStream objects are marked at position zero by default when constructed. They may be marked at another position within the buffer by the mark() method. The current buffer position is set to this point by the reset() method.

If no mark has been set, then the value of mark is the offset passed to the constructor (or 0 if the offset was not supplied).

**Since:** JDK1.1

### count

protected int **count**

The index one greater than the last valid character in the input stream buffer. This value should always be nonnegative and not larger than the length of buf. It is one greater than the position of the last byte within buf that can ever be read from the input stream buffer.

| **Constructor Detail** |
| --- |

### ByteArrayInputStream

public **ByteArrayInputStream**(byte[] buf)

Creates a ByteArrayInputStream so that it uses buf as its buffer array. The buffer array is not copied. The initial value of pos is 0 and the initial value of count is the length of buf.

**Parameters:**buf - the input buffer.

### ByteArrayInputStream

public **ByteArrayInputStream**(byte[] buf,  
 int offset,  
 int length)

Creates ByteArrayInputStream that uses buf as its buffer array. The initial value of pos is offset and the initial value of count is the minimum of offset+length and buf.length. The buffer array is not copied. The buffer's mark is set to the specified offset.

**Parameters:**buf - the input buffer.offset - the offset in the buffer of the first byte to read.length - the maximum number of bytes to read from the buffer.

| **Method Detail** |
| --- |

### read

public int **read**()

Reads the next byte of data from this input stream. The value byte is returned as an int in the range 0 to 255. If no byte is available because the end of the stream has been reached, the value -1 is returned.

This read method cannot block.

**Specified by:**[read](http://docs.google.com/java/io/InputStream.html#read()) in class [InputStream](http://docs.google.com/java/io/InputStream.html) **Returns:**the next byte of data, or -1 if the end of the stream has been reached.

### read

public int **read**(byte[] b,  
 int off,  
 int len)

Reads up to len bytes of data into an array of bytes from this input stream. If pos equals count, then -1 is returned to indicate end of file. Otherwise, the number k of bytes read is equal to the smaller of len and count-pos. If k is positive, then bytes buf[pos] through buf[pos+k-1] are copied into b[off] through b[off+k-1] in the manner performed by System.arraycopy. The value k is added into pos and k is returned.

This read method cannot block.

**Overrides:**[read](http://docs.google.com/java/io/InputStream.html#read(byte%5B%5D,%20int,%20int)) in class [InputStream](http://docs.google.com/java/io/InputStream.html) **Parameters:**b - the buffer into which the data is read.off - the start offset in the destination array blen - the maximum number of bytes read. **Returns:**the total number of bytes read into the buffer, or -1 if there is no more data because the end of the stream has been reached. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - If b is null. [IndexOutOfBoundsException](http://docs.google.com/java/lang/IndexOutOfBoundsException.html) - If off is negative, len is negative, or len is greater than b.length - off**See Also:**[InputStream.read()](http://docs.google.com/java/io/InputStream.html#read())

### skip

public long **skip**(long n)

Skips n bytes of input from this input stream. Fewer bytes might be skipped if the end of the input stream is reached. The actual number k of bytes to be skipped is equal to the smaller of n and count-pos. The value k is added into pos and k is returned.

**Overrides:**[skip](http://docs.google.com/java/io/InputStream.html#skip(long)) in class [InputStream](http://docs.google.com/java/io/InputStream.html) **Parameters:**n - the number of bytes to be skipped. **Returns:**the actual number of bytes skipped.

### available

public int **available**()

Returns the number of remaining bytes that can be read (or skipped over) from this input stream.

The value returned is count - pos, which is the number of bytes remaining to be read from the input buffer.

**Overrides:**[available](http://docs.google.com/java/io/InputStream.html#available()) in class [InputStream](http://docs.google.com/java/io/InputStream.html) **Returns:**the number of remaining bytes that can be read (or skipped over) from this input stream without blocking.

### markSupported

public boolean **markSupported**()

Tests if this InputStream supports mark/reset. The markSupported method of ByteArrayInputStream always returns true.

**Overrides:**[markSupported](http://docs.google.com/java/io/InputStream.html#markSupported()) in class [InputStream](http://docs.google.com/java/io/InputStream.html) **Returns:**true if this stream instance supports the mark and reset methods; false otherwise.**Since:** JDK1.1 **See Also:**[InputStream.mark(int)](http://docs.google.com/java/io/InputStream.html#mark(int)), [InputStream.reset()](http://docs.google.com/java/io/InputStream.html#reset())

### mark

public void **mark**(int readAheadLimit)

Set the current marked position in the stream. ByteArrayInputStream objects are marked at position zero by default when constructed. They may be marked at another position within the buffer by this method.

If no mark has been set, then the value of the mark is the offset passed to the constructor (or 0 if the offset was not supplied).

Note: The readAheadLimit for this class has no meaning.

**Overrides:**[mark](http://docs.google.com/java/io/InputStream.html#mark(int)) in class [InputStream](http://docs.google.com/java/io/InputStream.html) **Parameters:**readAheadLimit - the maximum limit of bytes that can be read before the mark position becomes invalid.**Since:** JDK1.1 **See Also:**[InputStream.reset()](http://docs.google.com/java/io/InputStream.html#reset())

### reset

public void **reset**()

Resets the buffer to the marked position. The marked position is 0 unless another position was marked or an offset was specified in the constructor.

**Overrides:**[reset](http://docs.google.com/java/io/InputStream.html#reset()) in class [InputStream](http://docs.google.com/java/io/InputStream.html) **See Also:**[InputStream.mark(int)](http://docs.google.com/java/io/InputStream.html#mark(int)), [IOException](http://docs.google.com/java/io/IOException.html)

### close

public void **close**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Closing a ByteArrayInputStream has no effect. The methods in this class can be called after the stream has been closed without generating an IOException.

**Specified by:**[close](http://docs.google.com/java/io/Closeable.html#close()) in interface [Closeable](http://docs.google.com/java/io/Closeable.html)**Overrides:**[close](http://docs.google.com/java/io/InputStream.html#close()) in class [InputStream](http://docs.google.com/java/io/InputStream.html) **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if an I/O error occurs.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ByteArrayInputStream.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
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[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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