Class java.lang.Character

```
java.lang.Object
   |
   +----java.lang.Character
```

---

public final class **Character**
extends Object

The Character class provides an object wrapper for Character data values and serves as a place for character−oriented operations. A wrapper is useful because most of Java's utility classes require the use of objects. Since characters are not objects in Java, they need to be "wrapped" in a Character instance.

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o **MAX_RADIX**
The maximum radix available for conversion to and from Strings.
o **MIN_RADIX**
The minimum radix available for conversion to and from Strings.

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o **Character**(char)
Constructs a Character object with the specified value.

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o **charValue**()
Returns the value of this Character object.
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Returns the numeric value of the character digit using the specified radix.

- **forDigit**(int, int)
  Returns the character value for the specified digit in the specified radix.
- **isDigit**(char)
  Determines if the specified character is a ISO−LATIN−1 digit.
- **isLowerCase**(char)
  Determines if the specified character is ISO−LATIN−1 lower case.
- **isSpace**(char)
  Determines if the specified character is ISO−LATIN−1 white space according to Java.
- **isUpperCase**(char)
  Determines if the specified character is ISO−LATIN−1 upper case.
- **toLowerCase**(char)
  Returns the lower case character value of the specified ISO−LATIN−1 character.
- **toString**()
  Returns a String object representing this character's value.
- **toUpperCase**(char)
  Returns the upper case character value of the specified ISO−LATIN−1 character.

Variables

- **MIN_RADIX**

```
public final static int MIN_RADIX
```

  The minimum radix available for conversion to and from Strings. The lowest minimum value that a radix can be is 2.
  See Also:
  toString

- **MAX_RADIX**

```
public final static int MAX_RADIX
```

  The maximum radix available for conversion to and from Strings. The largest maximum value that a radix can have is 36.
  See Also:
  toString

Constructors

- **Character**

```
public Character(char value)
```

  Constructs a Character object with the specified value.
  Parameters:
  value − value of this Character object

Methods

o **isLowerCase**

```
public static boolean isLowerCase(char ch)
```

Determines if the specified character is ISO−LATIN−1 lower case.
Parameters:
ch − the character to be tested
Returns:
true if the character is lower case; false otherwise.

o **isUpperCase**

```
public static boolean isUpperCase(char ch)
```

Determines if the specified character is ISO−LATIN−1 upper case.
Parameters:
ch − the character to be tested
Returns:
true if the character is upper case; false otherwise.

o **isDigit**

```
public static boolean isDigit(char ch)
```

Determines if the specified character is a ISO−LATIN−1 digit.
Parameters:
ch − the character to be tested
Returns:
true if this character is a digit; false otherwise.

o **isSpace**

```
public static boolean isSpace(char ch)
```

Determines if the specified character is ISO−LATIN−1 white space according to Java.
Parameters:
ch − the character to be tested
Returns:
true if the character is white space; false otherwise.

o **toLowerCase**

```
public static char toLowerCase(char ch)
```

Returns the lower case character value of the specified ISO−LATIN−1 character. Characters that are not upper case letters are returned unmodified.
Parameters:

ch – the character to be converted

o **toUpperCase**

```
public static char toUpperCase(char ch)
```

Returns the upper case character value of the specified ISO–LATIN–1 character. Characters that are not lower case letters are returned unmodified. Note that German ess–zed and latin small letter y diaeresis have no corresponding upper case letters, even though they are lower case. There is a capital y diaeresis, but not in ISO–LATIN–1...

Parameters:

ch – the character to be converted

o **digit**

```
public static int digit(char ch,
                        int radix)
```

Returns the numeric value of the character digit using the specified radix. If the character is not a valid digit, it returns –1.

Parameters:

ch – the character to be converted

radix – the radix

o **forDigit**

```
public static char forDigit(int digit,
                            int radix)
```

Returns the character value for the specified digit in the specified radix. If the digit is not valid in the radix, the 0 character is returned.

Parameters:

digit – the digit chosen by the character value

radix – the radix containing the digit

o **charValue**

```
public char charValue()
```

Returns the value of this Character object.

o **toString**

```
public String toString()
```

Returns a String object representing this character's value.

Overrides:

toString in class Object