

Java Quick Reference

Accessible methods from the Java library that may be included in the exam

| Class Constructors and Methods | Explanation |
|--|---|
| String Class | |
| <code>String(String str)</code> | Constructs a new <code>String</code> object that represents the same sequence of characters as <code>str</code> |
| <code>int length()</code> | Returns the number of characters in a <code>String</code> object |
| <code>String substring(int from, int to)</code> | Returns the substring beginning at index <code>from</code> and ending at index <code>to - 1</code> |
| <code>String substring(int from)</code> | Returns <code>substring(from, length())</code> |
| <code>int indexOf(String str)</code> | Returns the index of the first occurrence of <code>str</code> ; returns <code>-1</code> if not found |
| <code>boolean equals(String other)</code> | Returns <code>true</code> if <code>this</code> is equal to <code>other</code> ; returns <code>false</code> otherwise |
| <code>int compareTo(String other)</code> | Returns a value <code><0</code> if <code>this</code> is less than <code>other</code> ; returns zero if <code>this</code> is equal to <code>other</code> ; returns a value <code>>0</code> if <code>this</code> is greater than <code>other</code> |
| Integer Class | |
| <code>Integer(int value)</code> | Constructs a new <code>Integer</code> object that represents the specified <code>int</code> value |
| <code>Integer.MIN_VALUE</code> | The minimum value represented by an <code>int</code> or <code>Integer</code> |
| <code>Integer.MAX_VALUE</code> | The maximum value represented by an <code>int</code> or <code>Integer</code> |
| <code>int intValue()</code> | Returns the value of this <code>Integer</code> as an <code>int</code> |
| Double Class | |
| <code>Double(double value)</code> | Constructs a new <code>Double</code> object that represents the specified <code>double</code> value |
| <code>double doubleValue()</code> | Returns the value of this <code>Double</code> as a <code>double</code> |
| Math Class | |
| <code>static int abs(int x)</code> | Returns the absolute value of an <code>int</code> value |
| <code>static double abs(double x)</code> | Returns the absolute value of a <code>double</code> value |
| <code>static double pow(double base, double exponent)</code> | Returns the value of the first parameter raised to the power of the second parameter |
| <code>static double sqrt(double x)</code> | Returns the positive square root of a <code>double</code> value |
| <code>static double random()</code> | Returns a <code>double</code> value greater than or equal to <code>0.0</code> and less than <code>1.0</code> |
| ArrayList Class | |
| <code>int size()</code> | Returns the number of elements in the list |
| <code>boolean add(E obj)</code> | Appends <code>obj</code> to end of list; returns <code>true</code> |
| <code>void add(int index, E obj)</code> | Inserts <code>obj</code> at position <code>index</code> ($0 \leq \text{index} \leq \text{size}$), moving elements at position <code>index</code> and higher to the right (adds 1 to their indices) and adds 1 to size |
| <code>E get(int index)</code> | Returns the element at position <code>index</code> in the list |
| <code>E set(int index, E obj)</code> | Replaces the element at position <code>index</code> with <code>obj</code> ; returns the element formerly at position <code>index</code> |
| <code>E remove(int index)</code> | Removes element from position <code>index</code> , moving elements at position <code>index + 1</code> and higher to the left (subtracts 1 from their indices) and subtracts 1 from size; returns the element formerly at position <code>index</code> |
| Object Class | |
| <code>boolean equals(Object other)</code> | |
| <code>String toString()</code> | |