| | | |
|---|---|---|
| class | method | compile |
| compiler | statement | variable |
| declare | primitive type | comment |

| | | |
|---|---|---|
| Translate source code into another representation, such as compiling Java source to bytecode. | A defined way of performing a task or investigation; in programming, a function associated with a class or object. | A Java definition describing an object type's fields and methods, distinct from an instance created from that class. |
| A quantity or named value that can change or take different values. | A unit of program instruction, such as an assignment, method call, selection or loop; not every kind ends with a semicolon. | Software that translates a program from a source language into another form, commonly machine or intermediate code. |
| Explanatory text in source code or markup that does not execute as a program instruction. | The language's basic non-reference types; in Java, these are the Boolean and numeric types. | Introduce a variable, method or other named program element with its required type or declaration details. |

| | | |
|---|---|---|
| camelCase | arithmetic | integer division |
| object | wrapper class | random |
| cast | condition | comparison |

| | | |
|---|---|---|
| For Java integer operands, division discarding the fractional part by rounding towards zero. | Calculations involving numbers and operations such as addition, subtraction, multiplication and division. | A naming style that joins words without spaces, beginning later words with capitals, such as totalScore. |
| Describing outcomes governed by chance rather than being individually predictable with certainty. | In Java, a class whose objects represent values of a corresponding primitive type, such as Integer for int. | An entity in a program with associated state and behaviour, often an instance of a class. |
| Examining two or more items to identify similarities, differences or their relative order. | A requirement or circumstance that affects what happens or whether something is true. | An explicit conversion to a specified type, potentially losing numeric information or causing a run-time reference-cast failure. |

| | | |
|---|---|---|
| logical operator | accumulator | nested loop |
| String | immutable | concatenation |
| array | search | 2-D array |

| | | |
|---|---|---|
| A loop located inside another loop, so its iterations occur as part of each relevant outer iteration. | A register used to hold intermediate arithmetic or logical results during processing. | An operator combining or negating Boolean values, such as &&, \|\| or ! in Java. |
| Joining sequences, such as strings, end to end. | Unable to have its value or state changed after creation. | A sequence of characters treated as a single data value. |
| An array structure whose elements are accessed using two indices; Java represents it using arrays whose elements refer to arrays. | Look through data to find an item or establish whether it is present. | An indexed collection of elements arranged in one or more dimensions. |

| | | |
|---|---|---|
| grid | resizable | wrapper |
| generic | shift | class |
| field | constructor | method |

| | | |
|---|---|---|
| A Java class representing a primitive value as an object, such as Integer for int. | Able to change how many elements it contains, as an ArrayList can; this does not mean a Java array's length changes. | A collection arranged or treated as rows and columns, often represented by a two-dimensional array. |
| A Java definition describing an object type's fields and methods, distinct from an instance created from that class. | Moving a binary value's bits left or right by a specified number of positions. | A type parameter or parameterised type that allows code to work with specified types while retaining compile-time type checking. |
| A defined way of performing a task or investigation; in programming, a function associated with a class or object. | A special operation used to initialise a newly created object. | A named item of data within a database record. |

| | | |
|---|---|---|
| encapsulation | accessor | mutator |
| inheritance | subclass | superclass |
| override | polymorphism | recursion |

| | | |
|---|---|---|
| A method that changes an object's state. | A method that provides access to an object's information, usually without changing the object's state. | Grouping data with the operations that use it and controlling access through an interface. |
| A class from which another class inherits attributes or behaviour. | A class that inherits attributes or behaviour from another class and may extend or override them. | The mechanism by which a class acquires attributes or behaviour from another class. |
| A method that calls itself. | Using a common type or interface while the appropriate overridden instance behaviour is selected for the actual object. | Provide a subclass implementation of an inherited instance method with a matching signature under Java's rules. |

| | | |
|---|---|---|
| base case | recursive call | merge sort |
| merge | linear search | binary search |
| sorted | selection sort | insertion sort |

| | | |
|---|---|---|
| The recursive sort on the AP exam: split the array in half, sort each half recursively, then merge the two sorted halves. | A call a routine makes to itself, directly or indirectly, as part of solving a problem recursively. | A case that can be solved directly and stops further recursive calls. |
| A search of ordered data that repeatedly compares with the middle item and discards half of the remaining search range. | Checking items in sequence until the required item is found or the list ends. | Combining items from separate collections into one collection, often preserving a required ordering. |
| A sorting method that inserts each new item into its correct position in the already sorted part of a list. | A sorting algorithm that repeatedly selects the smallest remaining item and places it next in the sorted portion. | Arranged according to a specified ordering, such as increasing numerical value. |

| | | |
|---|---|---|
| parse | split | free-response |
| | | |
| | | |

| | | |
|---|---|---|
| An assessment format requiring the student to construct an answer or program rather than select a supplied option. | Divide a string into parts according to a separator or pattern; Java String.split uses a regular-expression pattern. | Interpret input according to a format or grammar, such as converting a numeric string into a number. |
| | | |
| | | |