# Terms in this set

**Method**

A group of statements to perform a specific task

**Char type**

A character data type used to represent a single character

**Encoding**

Mapping a character to its binary representation

**Encoding Scheme**

How characters are encoded

**Escape Character**

\ (the backslash)

**Escape Sequence**

\\ (two backslashes)

**String**

A predefined class in the Java library, not a primitive type, a reference type, also an object

**Static Method**

A non-instant method that can be invoked without using an object

**Instance Method**

Only can be invoked from a specific string instance

**Format Specifier**

Specifies how an item should be displayed, which may be a numeric value, character, Boolean value, or string. Begins with %

**Loop Body**

The part of the loop that contains the statements to be repeated

**Iteration**

A one-time execution of a loop body

**Infinite Loop**

A loop statement that executes infinitely

**Loop**

Controls how many times an operation or sequence of operations performed in succession

**Off-by-One Error (Loops)**

Executing a loop one more/less time accidentally

**While Loop**

Checks the loop-continuation-condition first. If the condition is true, its body is executed; if it is false, it terminates

**Sentinel Value**

A special value that signifies the end of the loop

**Do-While Loop**

Similar to while loop; executes the loop body first and then checks the loop-continuation-condition to decide whether to continue or to terminate

**Input Redirection**

The program takes the input from the file Input.TXT rather than having the user type the data from the keyword at runtime

**Output Redirection**

Sends the output to a file rather than displaying it on the console

**For Loop**

Used to execute a loop body a fixed number of times; has three parts: initial action that initializes a control variable, the loop-continuation-condition, and execution after each iteration and is often used to adjust the control variable

**Pre-Test Loop**

While & For Loops; the continuation condition is checked before the loop body is executed

**Post-Test Loop**

Do-While Loop; the condition is checked after the loop body is executed

**Nested Loop**

Consists of an outer loop and one or more inner loops

**Break Statement**

Immediately ends the innermost loop

**Continue Statement**

Only ends a current iteration

**Actual Parameter/Argument**

The actual value that is passed into the method by a caller

**Modifier**

Keywords such as public, static, and final

**Formal Parameter/Parameter**

The variable used in a method to stand for the value that is passed into the method by a caller

**Method Signature**

The method name and the parameter list

**Pass-By-Value**

The value of the argument passed to the parameter when a method is invoked with an argument

**Ambiguous Invocation**

When there are two or more possible matches for the invocation of a method, but the compiler is unable to determine the best match

**Method Overloading**

When there are two methods have the same name but different parameter lists within one class

**Scope of a Variable**

The part of the program where the variable is accessible

**Divide-and-Conquer / Stepwise Refinement**

A technique of writing software where you gradually add error checking and functionality

**Method Abstraction**

Separating the use of a method from its implementation

**Information Hiding/Encapsulation**

Using a method without knowing how it is implemented

**Stub**

A simple, incomplete version of a method

**Array**

Stores a fixed-size sequential collection of elements in the same type

**Index**

A numeric association to an element in a collection of data; the position of an object in an array

**Indexed Variable**

The variable inside the brackets, [ ]

**Array Initializer**

Combines the declaration, creation, and initialization of an array in one statement

**Off-by-One Error (Arrays)**

When one references the first element in an array with index [ 1 ], but it should be [ 0 ]

**Garbage Collection**

An automatic memory management feature that is collected by the Java Virtual Machine

**Anonymous Array**

When there is no explicit reference variable for an array

**Searching**

The process of looking for a specific element in an array

# MCQ

1. \\ (two backslashes)

**Escape Sequence**

1. \ (the backslash)

**Escape Character**

1. A simple, incomplete version of a method

**Stub**

1. The actual value that is passed into the method by a caller

**Actual Parameter/Argument**

1. The process of looking for a specific element in an array

**Searching**

1. Stores a fixed-size sequential collection of elements in the same type

**Array**

1. Checks the loop-continuation-condition first. If the condition is true, its body is executed; if it is false, it terminates

**While Loop**

1. Consists of an outer loop and one or more inner loops

Nested loop

1. When there are two methods have the same name but different parameter lists within one class

Method Overloading

1. The value of the argument passed to the parameter when a method is invoked with an argument

Pass-By-Value

1. The variable used in a method to stand for the value that is passed into the method by a caller

Formal Parameter/Parameter

1. The program takes the input from the file Input.TXT rather than having the user type the data from the keyword at runtime

Input Redirection

1. Continue Statement

C. Only ends a current iteration

1. Escape Character

E. \ (the backslash)

1. Method Signature

B. The method name and the parameter list

1. Escape Sequence

A. \\ (two backslashes)

1. Break Statement

D. Immediately ends the innermost loop

1. A group of statements to perform a specific task

Method

1. Mapping a character to its binary representation

Encoding

1. When there is no explicit reference variable for an array

Anonymous Array

1. The process of looking for a specific element in an array

Searching

1. Separating the use of a method from its implementation

Method Abstraction

1. Sends the output to a file rather than displaying it on the console → Output Redirection

True

1. Do-While Loop; the condition is checked after the loop body is executed → Pre-Test Loop

False

It should be → Post-Test Loop

1. An automatic memory management feature that is collected by the Java Virtual Machine → Method Abstraction

False

It should be → Garbage Collection

1. Keywords such as public, static, and final → Infinite Loop

False

It should be → Modifier

1. When there are two or more possible matches for the invocation of a method, but the compiler is unable to determine the best match → Ambiguous Invocation

**CORRECT**

True

A special value that signifies the end of the loop

**Sentinel Value**

Sends the output to a file rather than displaying it on the console

**Output Redirection**

The actual value that is passed into the method by a caller

**Actual Parameter/Argument**

Using a method without knowing how it is implemented

**Information Hiding/Encapsulation**