Using Objects and Methods

AP Computer Science A · Vocabulary in context

Word	Example
algorithm /'ælgərɪθəm/	An **algorithm** is a list of steps to solve a problem.
program /'prəʊgræm/	A **program** is a list of instructions for the computer.
compiled /kəm'paɪld/	Java code is **compiled** before it runs. Java
compiler /kəm'paɪlə/	The **compiler** turns the whole program into machine code.
syntax error /'sɪntæks 'erə/	A missing bracket is a **syntax error**.
logic error /'lɒdʒɪk 'erə/	A **logic error** gives the wrong answer but does not stop the program.
variable /'veərɪəbl/	A **variable** stores a value that can change.
type /taɪp/	The number 8 has the **type** int. 8 int
primitive types /'prɪmɪtɪv taɪps/	int and boolean are **primitive types**. int boolean
expression /ek'spreʃn/	2 + 3 - 1 is an **expression** with the value 4. 2 + 3 - 1 4
modulus /'mɒdjʊləs/	The **modulus** operator % gives the remainder: 19 % 4 is 3. % 19 % 4 3
escape sequence /e'skeɪp 'si:kwəns/	The **escape sequence** \n starts a new line. \n
assignment /ə'saɪnmənt/	Total ← 0 is an **assignment**. Total ← 0
Casting /'kæstɪŋ/	**Casting** (int) 3.7 gives 3. 3.7 (int) 3

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library /'laɪbrəri/	A **library** gives you ready-made functions.
abstraction /əb'strækʃn/	A map uses **abstraction**: it leaves out small details.
Comments /'kɒments/	**Comments** explain the code to people but do not run.
method signature /'meθəd 'sɪgnɪtʃə/	The **method signature** is the method's name and parameter types.
arguments /'ɑ:gju:mənts/	Pass the **arguments** 5 and 3 to the function. 5 3
class (static) method /klæs 'meθəd/	Math.sqrt is a **class (static) method**. Math.sqrt
class /klæs/	A **class** is a plan for making objects.
object /'ɒbdʒekt/	Each car in the game is an **object**.
instance /'ɪnstəns/	Each dog object is an **instance** of the Dog class. Dog
object-oriented programming /'ɒbdʒekt 'ɔ:rɪəntɪd 'prəʊgræmɪŋ/	**Object-oriented programming** builds programs from objects.
superclass /'su:pəklæs/	Vehicle is the **superclass** of Bus. Vehicle Bus
subclasses /'sʌbklæsɪz/	Dog and Cat are **subclasses** of Animal. Dog Cat Animal
inheritance relationship /ɪn'herɪtəns rɪ'leɪʃənʃɪp/	"A Dog is an Animal" shows an **inheritance relationship**. "A Dog is an Animal"
method overriding /'meθəd ˌəʊvə'raɪdɪŋ/	**Method overriding** lets a subclass change an inherited method.

Word	Example
Instantiation /ˌɪnstænʃiˈeɪʃn/	**Instantiation** creates an object with new. new
constructor /kənˈstrʌktə/	The **constructor** sets up a new object.
reference /ˈrefrəns/	A variable holds a **reference** to an object, not a copy.
null /nʌl/	A reference set to **null** points to no object. null
instance method /ˈɪnstəns ˈmeθəd/	length() is an **instance method** of String. length() String
immutable /ɪˈmjuːtəbl/	Strings are **immutable**: you cannot change one letter in place.
API /ˌeɪ piː ˈaɪ/	The weather **API** gives our app today's temperature.
precondition	For findMaximum, a nonempty list is a **precondition**. findMaximum
postcondition	After sort returns, ascending order is its **postcondition**. sort
overloaded	Math.abs is **overloaded** for int and double arguments. Math.abs int double

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