Data Collections

AP Computer Science A · Vocabulary in context

Word	Example
privacy /ˈprɪvəsi/	**Privacy** means people control who sees their information.
consent /kənˈsent/	Ask for **consent** before you collect data.
bias /ˈbaɪəs/	A program trained on unfair data can show **bias**.
variable /ˈveərɪəbl/	A **variable** stores a value that can change.
data structure /ˈdeɪtə ˈstrʌktʃə/	An array is a simple **data structure**.
array /əˈreɪ/	An **array** stores many values under one name.
index /ˈɪndeks/	Use **index** 3 to read the third item in the array. 3
Traverse /trəˈvɜːs/	**Traverse** the array from first to last.
duplicate	The method returns true if the array has a **duplicate** value. true
• **element** /ˈelɪmənt/	Each **element** of the array holds one value.
method header	The **method header** states its return type, name and parameters. `
token	nextInt() reads the next **token** as an int. nextInt() int
object /ˈɒbdʒekt/	Each car in the game is an **object**.
primitive /ˈprɪmɪtɪv/	int is a **primitive** type, not a class. int

exercises.lol exercises.com.cn

Word	Example
autoboxing /ˌɔːtəʊˈbɒksɪŋ/	**Autoboxing** turns an int into an Integer. int Integer
unboxing /ʌnˈbɒksɪŋ/	**Unboxing** turns an Integer back into an int. Integer int
ArrayList /əˈreɪ lɪst/	An **ArrayList** can grow and shrink. ArrayList
algorithm /ˈælgərɪðəm/	An **algorithm** is a list of steps to solve a problem.
2D array /ˌtuː ˈdiː əˈreɪ/	A **2D array** has rows and columns.
nested loop /ˈnestɪd luːp/	A **nested loop** is a loop inside another loop.
row-major order /rəʊ ˈmeɪdʒə ˈɔːdə/	**Row-major order** goes through row 0 first, then row 1. 0 1
Linear search /ˈlɪnɪə sɜːtʃ/	**Linear search** checks each item in turn.
Binary search /ˈbaɪnəri sɜːtʃ/	**Binary search** halves a sorted list each step.
sorted /ˈsɔːtɪd/	Binary search only works on a **sorted** list.
Selection sort /sɪˈlekʃn sɔːt/	**Selection sort** picks the smallest item each time.
Insertion sort /ɪnˈsɜːʃn sɔːt/	**Insertion sort** puts each new item in its right place.
Recursion /rɪˈkɜːʃn/	**Recursion** means a method calls itself.
base case /beɪs keɪs/	A recursive method stops at its **base case**.
recursive case /rɪˈkɜːsɪv keɪs/	In the **recursive case**, the function calls itself again.
stack overflow /stæk ˌəʊvəˈfləʊ/	Recursion with no base case causes a **stack overflow**.

exercises.lol exercises.com.cn

Word	Example
iterative /ˈɪtərətɪv/	The **iterative** process repeats: design, test, improve.
Merge sort /mɜːdʒ sɔːt/	**Merge sort** splits the list, sorts each half, then joins them.
personally identifiable information /ˈpɜːsənəli aɪˈdentɪfaɪəbl ˌɪnfəˈmeɪʃn/	A student's phone number is **personally identifiable information**.

exercises.lol exercises.com.cn