



Ninth Edition

Be Prepared
for the
AP
Computer
Science
Exam in Java

Maria Litvin
Gary Litvin

Skylight Publishing
Andover, Massachusetts

**Copyright © 2026 by
Maria Litvin, Gary Litvin, and Skylight Publishing**

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the authors and Skylight Publishing.

ISBN 978-0-9972528-3-5

Skylight Publishing
9 Bartlet Street, Suite 70
Andover, MA 01810

web: www.skylit.com
email: sales@skylit.com
support@skylit.com

1 2 3 4 5 6 7 30 29 28 27 26

Printed in the United States of America

Preface

The AP Computer Science A (AP CSA) exam tests your understanding of basic concepts in computer science as well as your familiarity with Java programming. The exam covers roughly the material of a one-semester introductory college course in computer science (CS-1).

The designation “A” is a vestige of the earlier era (before 2010) when there were two exams, “A” and “AB”; the latter included data structures material: linked lists, stacks, queues, binary trees, and so on. More recently, the College Board added the AP Computer Science: Principles (AP CSP) course and exam. AP CSP is a lower-level exam that does not have a designated programming language and does not require coding fluency in any particular programming language.

In the spring of 2004, the computer science exams used Java for the first time.

Solutions to free-response exam questions written in a programming language other than Java or in pseudocode will not receive credit.

A working knowledge of Java is necessary but not sufficient for a good grade on the exam. You must also understand basic computer science concepts and be able to implement in Java some standard algorithms. As for Java: you don’t have to know the whole language, just a subset.

AP CSA Exam questions are written by the College Board’s AP Computer Science A Exam Development Committee, and exams are administered by the Educational Testing Service (ETS). The College Board currently offers 38 AP exams; in a recent year, nearly three million students took over five million AP Exams.

In the spring of 2025, the College Board redesigned the AP CSA exam and updated the *Computer Science A Course and Exam Description* (CED). The new CED, effective Fall 2025, has four units:

- Unit 1: Using Objects and Methods
- Unit 2: Selection and Iteration
- Unit 3: Class Creation
- Unit 4: Data Collections

Each unit specifies several “Learning Objectives”; each “Learning Objective” states in more detail several “Essential Knowledge” items.

The College Board has eliminated all object-oriented programming (OOP) topics from the exam. Inheritance, superclasses and subclasses, class hierarchies, and polymorphism are all excluded. What remains is writing short classes, instantiating objects, calling methods of user-defined and Java library classes, and using control structures (`if-else`, `for` and `while` loops). “Data collections” refers to one- and two-dimensional arrays and the `ArrayList` Java library class.

The format of the exam has changed, too: 42 multiple-choice questions instead of 40, each with four answer choices instead of five; shorter free-response questions. The exam’s four free-response questions test specific topics:

Question 1: Methods and Control Structures

Question 2: Write a small class

Question 3: Write one method that manipulates data in an `ArrayList`

Question 4: Write one method that uses a 2D Array

AP CSA exams are now fully digital, administered online using the College Board’s “Bluebook” testing app. During the exam, you will be given several sheets of scratch paper, and you may request more, if needed. While you need a computer with a Java compiler to learn how to program and how to implement common algorithms in Java, this book does not require the use of a computer. One-hundred-percent correct Java syntax is not the emphasis here; small mistakes (a missed semicolon or brace) that a compiler would normally help you catch will probably not affect your exam score. You’ll need a computer only to access collegeboard.org and our website, www.skylit.com/beprepared, for the latest updates and our solutions to the free-response questions from past exams. It is important to download and practice with Bluebook (bluebook.collegeboard.org/students/download-bluebook) before the exam.

It is not the goal of this book to teach you everything you need to know from scratch. For that, you need a complete textbook with exercises and coding projects. Most students who take the exam are enrolled in an AP CSA course at their school. A determined student can prepare for the exam on their own; it may take anywhere between one and ten months, and a good textbook will be even more important.

The goals of this book are to:

- describe the exam format and requirements
- describe the AP Java subset
- provide a thorough review of what you should know, with emphasis on the more difficult topics and common omissions and mistakes
- help you identify and fill the gaps in your knowledge
- offer sample exam questions with answers, hints, and solutions for you to practice with and analyze your mistakes

The College Board requires AP CSA courses to have a lab component — at least 20 hours of hands-on Java programming. Students are expected to use a computer for the course at least 3 hours per week. The Development Committee has made available six sample labs (only in the AP Classroom platform for teachers). These labs are samples only, for demonstrating the extent of lab work expected; they will not be tested on the AP exams.

Chapter 1 of this book explains the format and the Java subset for the exam and provides information about exam grading and exam-taking hints. Chapter 2 and Chapter 3 cover the elements of Java required for the exam. Chapter 4 reviews common searching and sorting algorithms and recursion. Chapters 1-4 contain sample multiple-choice questions with detailed explanations of all the right and wrong answers.

Chapter 5 is actually on the web at this book’s companion website, <http://www.skylit.com/beprepared>. It offers our annotated solutions to the free-response questions from past exams. At the end of the book are four complete practice exams followed by answers and solutions.



We thank the teachers and students who alerted us to several mistakes in the earlier editions of this book.

Our special thanks to Margaret Litvin and Aaron Litvin for making this book more readable with their thorough and thoughtful editing.