# AP Computer Science Principles Exam

**Regularly Scheduled Exam Date:** Wednesday afternoon, May 15, 2024

**Late-Testing Exam Date:** Thursday morning, May 23, 2024

| Section I | **Total Time:** 2 hours<br>**Number of Questions:** 70<br>**Percent of Total Score:** 70%*<br>**Writing Instrument:** Pencil required |
|---|---|
| Section II | **Total Time:** 1 hour<br>**Number of Questions:** 2<br>**Percent of Total Score:** 20%*<br>**Writing Instrument:** Either pencil or pen with black or dark blue ink |

**\* Note:** *In addition to the Written Response questions in Section II of the exam, the video and program code submitted as part of the Create Performance Task are worth 10% of the total AP Score. The performance task is submitted to the AP Digital Portfolio prior to the exam date. See more information about the exam at* **cb.org/ap-csp-exam**.

**Before Distributing Exams:** Check that the title on all exam covers is *Computer Science Principles* and the correct date is listed for the administration. If there are any exam booklets with a different title or the wrong date, contact the AP coordinator immediately.

**Reminder:** Calculators are **not** allowed for this exam.

NEW Beginning in 2023-24, the AP Computer Science Principles (CSP) Exam has two sections. Prior to the exam administration, the AP coordinator needs to print the Personalized Project Reference from the AP Digital Portfolio for each student taking the AP CSP Exam. Proctors need the Personalized Project Reference for each student along with all other exam materials. Students will use their Personalized Project Reference only during Section II of the exam.

## What Proctors Need to Bring to This Exam

- ☐ Exam packets
- ☐ NEW The Personalized Project Reference for each student taking the exam
- ☐ Answer sheets
- ☐ The personalized AP ID label sheet for each student taking the exam
- ☐ The school code (provided by the AP coordinator); have on hand in case any student is missing an AP ID label sheet
- ☐ **Part 2** of the *2023-24 AP Coordinator's Manual*
- ☐ This book—*2023-24 AP Exam Instructions*
- ☐ AP Exam Seating Chart template
- ☐ Pencil sharpener
- ☐ Container for students' electronic devices (if needed)
- ☐ Extra No. 2 pencils with erasers
- ☐ Unlined paper
- ☐ Stapler
- ☐ Watch
- ☐ Signs for the door to the testing room
  - – "Exam in Progress"
  - – "No Devices"

# Section I: Multiple Choice

> **Do not begin the exam instructions below until you have finished reading the General Instructions to students.**

Make sure you administer the exam on the scheduled date and begin the exam at the designated time.

Complete a seating chart for this exam; return it to the AP coordinator to be kept on file for six months. See pages 284–285 for a seating chart template and instructions. See exam seating requirements in the "Seating Policy" section in either **Part 2** of the *2023-24 AP Coordinator's Manual* or the *2023-24 AP Exam Instructions*.

**IMPORTANT:** Make sure before testing begins that you have a Personalized Project Reference (PPR) for each student who will be taking the exam. If there's a problem—either a student's PPR is missing entirely, a student says their PPR is not their final intended work, there are pages missing from the PPR, or it's illegible—notify the AP coordinator and take these steps.

**Note:** If a student says they want to take the exam without their PPR, tell them that a PPR must have been submitted as final in the AP Digital Portfolio for the written response section of the exam to be scored. If their PPR wasn't submitted as final, their written responses won't count toward their final score. The AP coordinator can confirm submission status in the AP Digital Portfolio.

- **If a PPR is missing because a student intentionally didn't submit it:**
  - The student can proceed with taking the exam without the PPR, but tell the student their written responses won't count toward their final score. The AP coordinator will submit an Incident Report to document this situation.

- **If a PPR is missing because a student mistakenly didn't submit it as final in the AP Digital Portfolio**, the student has two options, depending on school policy:
  - The student can be dismissed from the exam so they can have the opportunity to work with the AP coordinator to resubmit the PPR and take a late-testing exam. **OR**
  - The student can proceed with taking the exam without the PPR, but tell the student their written responses won't count toward their final score. If the student proceeds with taking the exam, the AP coordinator will submit an Incident Report.

- **If the PPR wasn't printed, pages are missing, or it's illegible:**
  - The proctor should notify the AP coordinator immediately so that the coordinator can print the PPR or missing pages before Section II.
  - However, if the AP coordinator finds that the PPR is illegible because of the way it was submitted, and it cannot be printed in a clearer way, depending on school policy, the student can either:
    - be dismissed from the exam so they can have the opportunity to work with the AP coordinator to resubmit the PPR and take a late-testing exam. **OR**
    - proceed with the exam without their printed PPR. If the student proceeds with taking the exam, the AP coordinator will submit an Incident Report.

- **If a student says their PPR is not their intended final version**, the student has two options, depending on school policy:
  - The student can be dismissed from the exam so they can have the opportunity to work with the AP coordinator to resubmit the PPR and take a late-testing exam. **OR**
  - The student can proceed with taking the exam with the PPR they have. If the student proceeds with taking the exam, the AP coordinator will submit an Incident Report.

**First, distribute each student's Personalized Project Reference.**

**When you are ready to begin, read the appropriate information from the box.**

> **If you are giving the regularly scheduled exam, say:**
>
> **It is Wednesday afternoon, May 15, and you will be taking the AP Computer Science Principles Exam.**
>
> **If you are giving the alternate exam for late testing, say:**
>
> **It is Thursday morning, May 23, and you will be taking the AP Computer Science Principles Exam.**

**Look at your exam packet and confirm that the exam title is "AP Computer Science Principles." Raise your hand if your exam packet has any other exam title and I will help you. . . .**

**Once you confirm that all students have the correct exam, say:**

**Next look at your Personalized Project Reference. Make sure your name is printed at the top, that the page or pages are legible, and that all pages are included. If anyone has a problem with their Personalized Project Reference, raise your hand and I'll help you. . . .**

If any student has a problem with their PPR, refer to the instructions on the prior page.

**Once you confirm that all students have their correct Personalized Project Reference, say:**

**Now, put your Personalized Project Reference under your chair. It must stay under your chair during Section I of the exam. You'll use it only during Section II.**

**Once all students have put their Personalized Project Reference under their desk, say:**

**Before you open the exam packet, remember that by opening this packet, you agree to all of the AP Program's policies and procedures referenced in the AP Exam Terms and Conditions.**

**You may now remove the shrinkwrap only from the outside of your exam packet. Do not open the Section I booklet; do not remove the shrinkwrap from the Section II booklets. Put the white seals and the shrinkwrapped Section II booklets aside. . . .**

**Carefully remove the AP Exam label from the top left of your exam booklet cover. Place it on the front of your answer sheet on the light blue box near the bottom that reads "AP Exam Label." . . .**

If students accidentally place the exam label in the space for the AP ID label or vice versa, advise them to leave the labels in place. They should not try to remove the label; their exam can still be processed correctly.

**Now turn over your answer sheet to the side marked page 2 and look at the section at the top of the page called "AP Exam I'm Taking." Print the name of this exam, the exam form, and the form code.**

**The exam form and the form code are on the front cover of the exam booklet in the lower right corner; ignore the large number under these two items—it is not part of the form or form code.**

**Look up when you have finished. . . .**

**When students have finished, say:**

**Listen carefully to all my instructions. I will give you time to complete each step. Please look up after completing each step. Raise your hand if you have any questions.**

Give students enough time to complete each step. Don't move on until all students are ready.

**Read the statements on the front cover of the multiple-choice booklet. . . .**

**Sign your name and write today's date. . . .**

**Now print your full legal name where indicated. . . .**

**Does anyone have any questions? . . .**

**Turn to the back cover of your exam booklet and read it completely. . . .**

Give students a few minutes to read the entire back cover.

**Are there any questions? . . .**

**You'll take the multiple-choice portion of the exam first. You should have in front of you the Section I multiple-choice booklet and your answer sheet. You may never discuss the multiple-choice exam content at any time in any form with anyone, including your teacher and other students. If you disclose the multiple-choice exam content through any means, your AP Exam score will be canceled.**

**You must complete the answer sheet using a No. 2 pencil only. Mark all of your responses on page 2 of your answer sheet. Remember, for numbers 1 through 62, mark only the single best answer to each question. The answer sheet has circles marked A–E for each of these questions. For Computer Science Principles you will use only the circles marked A–D. For numbers 131 through 138, mark the _two_ best answer choices for each question.**

**Completely fill in the circles. If you need to erase, do so carefully and completely. No credit will be given for anything written in the exam booklet. Scratch paper is not allowed, but you may use the margins or any blank space in the exam booklet for scratch work.**

**Your score on the multiple-choice section will be based solely on the number of questions answered correctly.**

**Are there any questions? . . .**

**Programming reference materials are located at the beginning of the booklet. As you encounter programming questions on the exam, you should use the reference materials to clarify the behavior of programming statements found in those questions.**

**The exam begins on page 10. You have two hours for the Section I multiple-choice section. Once final time is called, stop working immediately.**

**Now open your Section I exam booklet and begin.**

**Note Start Time _____ . Note Stop Time _____ .**

Check that students are marking their answers in pencil on their answer sheets. Make sure they've placed their AP ID label sheets under their chairs.

**After 1 hour and 50 minutes, say:**

**There are 10 minutes remaining.**

**After 10 more minutes, say:**

**Stop working and put your pencil down. Close your exam booklet and put your answer sheet faceup on your desk. Make sure your AP ID label and AP Exam label are on your answer sheet. Sit quietly while I collect your answer sheets.**

Collect an answer sheet from each student. Check that each answer sheet has an AP ID label and an AP Exam label.

**After all answer sheets have been collected, say:**

> Now you must seal your exam booklet using the white seals you set aside earlier. Affix one white seal to each area of your exam booklet cover marked "PLACE SEAL HERE." Fold each seal over the back cover. When you have finished, place the booklet faceup on your desk. I will now collect your multiple-choice booklet. . . .

Collect a Section I booklet from each student. Check that each student has signed the front cover and sealed the booklet. Confirm that the number of answer sheets you collected matches the number of exam takers.

There is a 10-minute break between Sections I and II.

**When all Section I materials have been collected and accounted for and you are ready for the break, say:**

> Please listen carefully to these instructions before we take a 10-minute break. Get your AP ID label sheet and your Personalized Project Reference from under your chair and put them both on your desk. You must leave your shrinkwrapped Section II packet, your AP ID label sheet, and your Personalized Project Reference on your desk during the break. All items you placed under your chair at the beginning of this exam must stay there. You are not permitted to open or access them in any way. You are not allowed to consult teachers, other students, notes, textbooks, or any other resources during the break. You may not make phone calls, send text messages, check email, use a social networking site, or access any electronic or communication device. You may not leave the designated break area. Remember, you may never discuss the multiple-choice exam content with anyone, and if you disclose the content through any means, your AP Exam score will be canceled. Are there any questions? . . .

> You may begin your break. Testing will resume at _____ .

Make sure students understand where the designated break area is.

**IMPORTANT:** Both the exam room and students in the designated break area must be monitored.

At the start of the break, walk around the room to ensure all Section II booklets and Personalized Project Reference sheets are accounted for on students' desks.

**If any student's Section II booklets are missing:** Immediately contact the Office of Testing Integrity (OTI). Testing must not resume until the booklet is located or OTI is contacted. (See contact information for OTI on the inside front cover of the *2023-24 AP Exam Instructions*.)

**If any student's Personalized Project Reference is missing:** The proctor should discuss this with the student to determine if the student took their Personalized Project Reference from the exam room.

- If the student took their Personalized Project Reference from the exam room, contact the AP coordinator and call OTI. Resume testing for the other students.

- If the student did not take their Personalized Project Reference, check the room and near the student's desk, and make sure it wasn't mistakenly collected with Section I exam materials.

## Section II: Written Response

**After the break, say:**

> May I have everyone's attention? Please look at your AP ID label sheet and Personalized Project Reference and double-check that your name is printed at the top of both to ensure you've returned to the correct seat. . . .

### Confirm that students have their AP ID label sheet and Personalized Project Reference, then say:

**For this section of the exam you will use a pen with black or dark blue ink or a No. 2 pencil to write your responses. Keep in mind that responses are scanned and will be scored in black and white only. Your responses should not depend on writing in multiple colors. Does everyone have either a pen or a pencil? . . .**

**You may now remove the shrinkwrap from the Section II packet, but do not open any booklets yet. I'll tell you when you can open them. . . .**

**You should now have in front of you:**

- **your AP ID label sheet,**
- **your Personalized Project Reference,**
- **the orange Section II: Written Response, Questions booklet, and**
- **the Section II: Written Response booklet with a shaded block of important identification information on the front cover. This booklet is where you'll write your responses.**

**First, look at the front cover of the orange Questions booklet. Read the bulleted statements. Look up when you have finished. . . .**

**Read the last statement. . . .**

**Print the first, middle, and last initials of your legal name in the boxes and print today's date where indicated. This constitutes your signature and your agreement to the statements on the front cover. . . .**

**Now look at the front cover of the Section II: Written Response booklet, and complete Items 1 through 3 under "Important Identification Information." For Item 3, your school code is printed at the top right of your AP ID label sheet. . . .**

Give students time to complete Items 1 through 3.

**Write today's date in Item 4—include month, day, and year.**

**Now read the bulleted items under "As you complete this booklet.". . .**

**Are there any questions? . . .**

**Now carefully remove the AP Exam label from the top left of your orange Questions booklet and place it in the shaded box on the top left of your written-response booklet. . . .**

**Now take an AP ID label from your label sheet and place it on the shaded box marked "AP ID Label" at the bottom of your written-response booklet. If you don't have any AP ID labels, write your AP ID in the box. Look up when you have finished. . . .**

If students accidentally place the exam label in the space for the AP ID label or vice versa, advise them to leave the labels in place. They should not try to remove the labels; their exam can still be processed correctly.

**Now I will collect your AP ID label sheet. Leave your label sheet on your desk. While I collect them, read the information on the back cover of the orange Questions booklet. Do not open any booklets until you are told to do so. Look up when you have finished. . . .**

At this point, collect the AP ID label sheet from every student.

### When you've finished collecting AP ID label sheets, say:

**Are there any questions? . . .**

**You have 1 hour for Section II. You are responsible for pacing yourself and may proceed freely from one question to the next.**

**You may make notes in the orange booklet. No credit will be given for any work written in the orange booklet.**

**You must write your responses in the written-response booklet. The pages in the booklet are labeled Question 1 and Question 2 to correspond to the questions you should answer on each page.**

**Refer to your Personalized Project Reference to answer the questions.**

**If you need to erase, do so carefully and completely. If you run out of space, raise your hand.**

**Once final time is called, stop working immediately.**

**Are there any questions? . . .**

**Now open both booklets and begin.**

🕐 **Note Start Time _____ . Note Stop Time _____ .**

Make sure students are writing their responses in their written-response booklet, **not** in their orange booklet.

If a student runs out of space and raises their hand, give them extra paper and instruct them to write the following on the top of each sheet they use:

- their AP ID,
- the exam title, and
- the question number they are working on.

They must not write their name.

### After 50 minutes, say:

**There are 10 minutes remaining.**

### After 10 more minutes, say:

**Stop working and put your pen or pencil down. Close both exam booklets and place them faceup on your desk. Keep your booklets separate; don't put one inside the other. . . .**

If any students used extra paper for a question in the written-response section, have those students staple the extra sheet(s) to the first page corresponding to that question in their written-response exam booklets. Return these written-response booklets with the extra sheets attached in the Incident Report return envelope (see page 281). An IR form will need to be submitted online through AP Registration and Ordering. Provide your AP coordinator with whatever information they need to complete the IR form.

### Then say:

**Remain in your seat, without talking, while the exam materials, including your Personalized Project Reference, are collected.**

Collect the written-response booklet, orange booklet, and Personalized Project Reference from each student. Check for the following:

- Written-response booklet front cover
  - The student placed the AP Exam label on the shaded box at the top,
  - Placed an AP ID label on the shaded box at the bottom, and
  - Completed the "Important Identification Information" area.

**Note:** If any student placed the labels in the wrong boxes, it's OK. Don't try to remove the labels, because this could damage the booklets or the labels. The student's exam materials can still be processed as long as both labels are on the booklet.

- The student wrote responses in the written-response booklet and not in the orange booklet.
  - ◆ If any students wrote their responses in the orange booklet instead of the written-response booklet, see "Answers written in an orange booklet instead of the free-response booklet (or written-response booklet)" on page 282 of the Administration Incidents table for instructions.
- Orange Questions booklet front cover
  - ◆ The student printed their initials and today's date.

The orange booklets must be returned with the rest of your exam materials. Keep the orange booklets separate from the written-response booklets. Do not place written-response booklets inside the orange booklets or vice versa.

Keep the Personalized Project Reference sheets separate from the exam booklets. Your coordinator will need to keep these securely on file for six months.

**Then say:**

> **I have a few final reminders. You can have one AP score report sent for free. If you haven't already done so, June 20 is the deadline to indicate or change the college, university, or scholarship program that you'd like to receive your free score report.**

---

**If you are giving the regularly scheduled exam, say:**

> **Never discuss or share the written-response exam content with anyone unless it's released on the College Board website in about two days. Your AP Exam scores will be available online in July.**

**If you are giving the alternate exam for late testing, say:**

> **Never discuss or share the content in this exam with anyone at any time. Your AP Exam scores will be available online in July.**

---

When all exam materials have been collected and accounted for, return to students any electronic devices you may have collected before the start of the exam.

**Then say:**

> **You are now dismissed.**

---

# After-Exam Tasks

Return the following to the AP coordinator:

- ☐ **Exam Materials**
- ☐ **Each student's Personalized Project Reference**, to be kept securely on file at the school for six months
- ☐ **AP ID Label Sheets**
- ☐ **Completed Seating Chart**, to be kept on file at the school for six months
- ☐ **Nonstandard Administration Reports (NARs)**, if applicable, to be kept on file at the school for six months
- ☐ **Information Needed to Complete Incident Report(s)**, if applicable

See **Part 2** of the *2023-24 AP Coordinator's Manual* for further information about these tasks.