

## Instructions for the Conduct of the Examination (ICE)

Pearson Edexcel Level1/Level 2 GCSE (9–1) in Computer Science Paper 2: Application of Computational Thinking (1CP2/02)

Summer 2024 Version 1.7

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#### Introduction

Welcome to the Instructions for the Conduct of the Examination (ICE) for Pearson Edexcel Level 1/Level 2 GCSE (9–1) in Computer Science, Paper 2: Application of Computational Thinking (1CP2/02).

This document provides you with the information you need to carry out the practical onscreen assessment.

Due to the nature of this assessment, it is necessary to release confidential material to centre staff on the day of the examination. It is therefore essential that centre staff read these instructions for the conduct of the examination before releasing any material to candidates. This is to ensure that the security of the examination is not inadvertently breached.

This document will be updated on an annual basis so that in each year of examination, the version to be used will be available by 31 January.

#### We're here to help

Please see our <u>frequently asked questions</u> and if you need more information, or have any further questions about this qualification that require the help of a subject specialist, contact <u>Pearson Customer Support</u> (Tel: 0344 463 2535).

### UK Regulations

You will need to start by familiarising yourself with the current Joint Council for Qualifications (JCQ) instructions on how to conduct examinations. These underpin all external assessments taken in the UK.

You can find the latest version of the JCQ Instructions for Conducting Examinations (ICE) document <u>here</u>.

The JCQ Instructions for Conducting Examinations (ICE) document covers guidance on the following:

- Preparing for the examination
- At the beginning of the examination
- During the examination
- At the end of the examination
- After the examination
- Invigilation arrangements
- Appendix 1 Conducting onscreen tests

You should follow these instructions as outlined in the JCQ Instructions for Conducting Examinations (ICE) document. If you need to adapt these instructions for Pearson Edexcel Level 1/Level 2 GCSE (9–1) in Computer Science, you'll find clear guidance on how to do this in this document.

### Key Dates

Summary of key dates for Pearson Edexcel Level 1/Level 2 GCSE (9–1) in Computer Science.

Activity	Date	Details & Information
Programming Language Subset (PLS)	Release by 31 January 2024	This document specifies which parts of Python 3 candidates are required to learn. The latest version will be available to download from the <u>GCSE Computer Science</u> <u>qualification website</u> within the current examination series.
Centre Examination Schedule Form	Submit by 31 March 2024	If multiple exam sessions are required, centres must submit their scheduling timetable for their candidates by completing the <u>Centre</u> <u>Examination Schedule</u> form.
Practical Programming Statement Form (PPS)	Submit by 31 May 2024	The Head of Centre must submit the <u>Practical</u> <u>Programming Statement</u> (PPS) form. Details of the PPS can be found in the <u>specification</u> , on page 16.
Release of Secure Coding Files	Released on 21 May 2024, 8am (BST)	The Secure Coding Files and the Programming Language Subset (PLS) document required for the examination <b>will be released at 8am</b> on the day of the examination.
		The Examination Officer can access these:
		<ul> <li>through the Secure Download Service (SDS) on <u>Edexcel Online</u> (guidance on using this service can be found <u>here</u>)</li> </ul>
		<ul> <li>or by downloading the files using gold- padlock credentials from the the <u>GCSE</u> <u>Computer Science qualification website</u> within the current examination series.</li> </ul>



Activity	Date	Details & Information
Examination Date	21 May 2024 pm	Date on which the examination is to be sat by candidates. You can find details of when we offer the assessment <u>here</u> .
Send Candidate Work to Examiner	From 21 May 2024 pm to 23 May 2024 12pm (BST)	The ' <b>Completed Coding</b> ' folder for <b>each</b> candidate <b>must</b> be zipped and uploaded securely using Pearson's Learner Work Transfer (LWT) system. Guidance on Digital Submission is available <u>here</u> within centre guidance. If there are issues with the LWT system, contact <u>Pearson Customer Support</u> (Tel: 0344 463 2535).
Results Day	22 August 2024	Results of the examination are given to candidates. You can find more details <u>here</u> .

#### General Instructions

- Pearson Edexcel will set one practical programming assessment each series.
- Information relating to the content of this examination should not be shared with any individual who does not have a legitimate need.
- Centres **must** submit a <u>Practical Programming Statement</u> form (PPS) by 31 May for the year of the entry, failure to submit this form may result in malpractice/maladministration.
- The start time for Pearson Edexcel examinations can be found <u>here</u>. To maintain the security of the examination, all candidates **must** start the examination within half an hour of the published start time, except where resource constraints mean that centres need to schedule the examination over more than one session due to an examination clash or because multiple sessions are needed due to the size of the cohort and number of computers available. These centres **must** timetable the examination sessions back-to-back, with the first session starting within half an hour of the published start time. Please refer to the **Timetable Clashes** section of the JCQ Instructions for Conducting Examinations (ICE) document.
- Candidates who take an examination later than the published start time must remain under centre supervision from 30 minutes after the published start time until the time when those candidates begin their examination.
- Where more than one examination session is held for GCSE Computer Science Paper 2, centres **must**:
  - keep an accurate record of candidates present at each session,
  - produce a schedule showing the times of each examination session to be held for their candidates on the day of the examination. The <u>Centre</u> <u>Examination Schedule form</u> **must** be submitted by 31 March in the year of entry.
- It is the responsibility of the centre to inform candidates, in advance, of the time of their examination.

# General Administration of the Examination

General centre administration for the examination.

Each candidate will require exclusive access to a centre PC (e.g. desktop/laptop) for the examination. Further information for the setup of the PC is in the 'Before the Examination' section of this document. ✓ Before the examination, centres must ensure all candidate PCs (e.g. desktops/ laptops), including 1–2–1 devices that may leave the school premises, are clean and secure for the use of high-stake assessments. Each secure user area must have a sufficient amount of disk space, around 50mb, to allow candidates to save their work. It is the responsibility of the centre to ensure that appropriate hardware and software are available to candidates. Candidates must **not** be allowed access to the internet during the examination. X **x** Before the examination, centres must ensure candidate secure user areas are setup without internet access or in some cases with tightly restricted internet access. For Chromebook centres the document here is an example of meeting controlled conditions or contact Pearson Customer Support (Tel: 0344 463 2535) if further guidance is required. **x** It is the invigilator's responsibility to ensure that candidates **do not** use the internet during the examination. Further information can be found in the 'Before the Examination' section of this document. **x** Communication between candidates is **not** allowed at any time during the examination. **v** Candidates must **not** have access to USB memory sticks or other storage devices. **x** It is **not** acceptable to store secure coding files in a shared area or in a central location where anyone can access them. **x** Candidates must **not** be given access to the secure coding files except during the examination itself. **x** Candidates must **not** be able to save files produced during the examination outside their secure user area.

#### Format of the Examination

The requirements of the examination are outlined below.

Requirement	Information
Set Up a Secure User Area	<ul> <li>Before the examination, the centre is required to set up a secure user area, such as a Windows user profile or equivalent, for each candidate and this should have read, write and run privileges.</li> <li>Secure user areas <b>should not</b> have access to the internet.</li> <li>Each candidate will need to save their work in their <b>COMPLETED CODING</b> folder (see the <u>'Before the Examination'</u> section of this document for further information).</li> </ul>
Unzip the Secure Coding Files	<ul> <li>Before the examination, centres will need to unzip the secure coding folder including any text-based files with the extension of .txt and place these files in the secure user area within the <b>STUDENT CODING</b> folder for each candidate (see the <u>'Before the Examination'</u> section of this document for further information).</li> </ul>
Materials Provided to Candidates	<ul> <li>A hard copy of the question paper.</li> <li>The Programming Language Subset (PLS) (a hard copy will be provided with the question paper and a digital version will be provided with the secure coding files).</li> </ul>
	<ul> <li>Digital versions of the required secure coding/text files for the examination.</li> <li>Secure user area login details (if required).</li> </ul>
The Examination	<ul> <li>Consists of a practical onscreen assessment that requires candidates to carry out programming tasks on a computer using an integrated development environment (IDE) with which they are familiar.</li> </ul>
	<ul> <li>The IDE should have secure <b>line numbers</b> as certain questions will direct candidates to particular lines.</li> <li>Collaborative functionality within the IDE must be disabled.</li> </ul>
The Question Paper	• The question paper provides instructions on what file names to use for modified pieces of code. It is essential that these instructions are followed, and the work is saved in the <b>COMPLETED CODING</b> folder.

### Security

Candidates must only have access to the question paper and secure coding files including any text-based files with the extension of .txt **during** their examination session. Centres are **not** permitted to allow candidates access to these materials at any other time before this.

Centre staff should **not** attempt to examine the secure coding files or discuss the contents of the files or question paper with any unauthorised person at any time until all examinations have been completed.

Centre staff can check that the correct secure coding files (i.e. number and names of files) and the Programming Language Subset (PLS) are present in each secure user area but they must **not** open the secure coding files.

Centre staff who have access to the question papers and the secure coding files must not use this knowledge to advantage any candidates by divulging the contents to any unauthorised person.

Centre staff should contact <u>Pearson Customer Support</u> (Tel: 0344 463 2535) immediately if there are any issues with the question paper, the Programming Language Subset (PLS) or the secure coding files.

#### Before the Examination

We recommend that centres give themselves enough time, in advance of the examination, to complete the following steps.

- Centres **must** create a secure user area, such as a Windows user profile or equivalent, for each candidate. These secure user areas should have read, write and run privileges. Candidates must **not** be able to access the internet during the examination. These secure user areas must not be accessible to candidates at any time other than during the examination itself and must only be accessible to the assigned candidate (i.e. candidates must not be able to access other secure user areas). If you require further guidance on restricting access to the internet, contact <u>Pearson Customer Support</u> (Tel: 0344 463 2535).
- If candidates require login and password details to access their secure user area on the day of the examination, centres must ensure these are received from the IT Technician. These login details are unique to each candidate and need to be placed at the candidate's workstation where they will complete the examination.
- When setting up the required secure user areas, centres must set up two folders for each candidate as below:
  - **STUDENT CODING:** This folder should **only** contain the secure coding files including any text-based files with the extension of .txt and Programming Language Subset (PLS) for each candidate.
  - **COMPLETED CODING:** This folder should **only** contain the candidate's new or amended code ready for marking.
- Centres must be able to identify each individual candidate's work, and ensure at the end of the examination, the correct **COMPLETED CODING** folder is carefully prepared in a zip file using the correct naming convention (see the <u>'After the Examination'</u> section of this document).



- Centres must ensure that candidates have access to an integrated development environment (IDE) they are familiar with, and which allows them to see **line numbers**. The IDE must be clear of any previous work and enable candidates to create, amend, run and test/debug code.
- The IDE must have any collaborative functionality disabled for the duration of the examination. Candidates should be provided with the relevant IDE and also standard classroom tools as defined by the teacher including a text editor (e.g. Microsoft Notepad) and directory explorer software (e.g. Microsoft Windows Explorer).
- Particular attention should be paid to the workspaces provided for candidates.
   Please refer to the **Accommodation** section of the <u>JCQ Instructions for</u> <u>Conducting Examinations</u> (ICE) document.
- Centres must ensure up-to-date virus prevention measures are in place.

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### On the Day of the Examination

#### Time Allowed

The examination is two hours.

No scheduled breaks are permitted during the examination.

No extra time can be allowed for slow machines or networks that run slowly.

If unforeseen technical difficulties arise such as power cuts, system crashes, hardware or software failures (which may affect individual workstations or the whole network), centres may need to continue the session at a different workstation or at a later time for the candidate(s) while the difficulties are resolved (see JCQ Instructions for Conducting Examinations (ICE) document).

Procedures for re-starting an assessment after an unplanned break (i.e. a technical failure) should ensure that the invigilator:

- controls the restart
- resets the timing, where necessary
- ensures that the candidate(s) can re-access their previous responses (where this is technically feasible and permitted by the assessment).

#### Materials

The secure coding files and a digital version of the Programming Language Subset (PLS) required for the examination **will be released at 8am (BST)** on the day of the exam (the digital version of the question paper, if required, will be released before the exam around 12pm (BST)).

The Examination Officer can access these either through the <u>Secure Download</u> <u>Service</u> (SDS) on <u>Edexcel Online</u> or by downloading the files using gold-padlock credentials from the <u>GCSE Computer Science qualification website</u> within the current examination series. The Examination Officer will need to give the centre's IT technicians access to the secure coding files including any text-based files with the extension of .txt and the digital version of the Programming Language Subset (PLS) so they can add these to each candidate secure user area. The files are secure and must **not** be shared via email.

Candidates may take only normal writing items (pen, pencil, ruler, etc.) into the examination.

They must **not** take in digital devices such as smartwatches, wristwatches with a data storage device, MP3 or MP4 devices, iPods, mobile phones, tablets and portable storage media.

Calculators, whose primary purpose is to carry out mathematical calculations including those on PCs (e.g. desktops and laptops), may be used by the candidate.

For further information please refer to the **Using Calculators** section in the <u>ICQ</u> <u>Instructions for Conducting Examinations</u> (ICE) document as well as the FAQs – Using Calculators.

Candidates are **not** allowed to refer to textbooks or centre-prepared manuals during the examination. They may use the offline help facilities within the integrated development environment (IDE).

For further information relating to restrictions on data storage and image capturing devices, please refer to the **Question papers, stationery, materials and other equipment** section in the <u>JCQ Instructions for Conducting Examinations</u> (ICE) document.

#### Invigilation and Technical Support

For onscreen assessments, particularly those involving a larger number of candidates and where more than one assessment is being conducted, it is recommended that a specialist invigilator is appointed. The specialist invigilator should have proven IT skills and experience in conducting onscreen assessments and be assisted by at least one other invigilator. However, **they must not be the sole invigilator, a teacher, tutor or a senior member of the centre staff who teaches the subject being examined**.

Technical help should be available throughout the examination in case of hardware/ software problems, and to assist with invigilation of the examination. Please refer to the **Timetable clashes** and **Invigilation arrangements** section of the <u>JCQ</u> <u>Instructions for Conducting Examinations</u> (ICE) document.

It is recommended, should the subject teacher be needed to provide IT expertise for the delivery of this exam, that this should only be done on an 'as needed' basis, and only if no other qualified member of staff is available. Subject teachers can only help diagnose the problem and suggest corrective actions to the IT technician. They should then leave the exam room and remain on call.

Before the start of the examination, under exam conditions, candidates should log in to their secure user area but not access the secure coding files or begin the assessment until the invigilator informs them that the exam has started.

Candidates are able to run their completed coding through their IDE before saving/ submitting the files.



#### After the Examination

Centres should follow the guidance below after the examination.

- At the end of the examination, candidates should be instructed to log out of their accounts. Candidates are not permitted to remove any materials from the examination room.
- At the end of the examination, the invigilators or IT technicians should ensure that the **correct folder** for each candidate, containing all files created during the examination, is zipped.
- For each candidate's work to be easily identified, the naming convention for the zip folder, should follow:

#### CENTRE NUMBER\_CANDIDATE NUMBER\_SURNAME\_FORENAME

For example: **12345\_0123\_SMITH\_ADAM** (forenames may be shortened if necessary but must remain unique, e.g. SMITH\_A).

• **An example** below shows a candidate's zip folder containing the files created during the examination.



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- Each candidate's zip folder should be transmitted accurately and securely using Pearson's Learner Work Transfer (LWT) system. Guidance on Digital Submission is available <u>here</u> within Centre guidance.
- Each candidate's zip folder (and all files within) is secure and must **not** be transferred via email.
- Each candidate's zip folder should be copied to one secure storage medium as a backup. Any storage medium used by centres should be safeguarded by the Examination Officer in case Pearson needs to request additional copies.
- We strongly advise centres to archive the secure user area for **each** candidate in their final form. The archive may be used if any candidates, files are missing and to also determine post results analysis. These should be securely stored until the end of the appeals period.
- Candidate secure user areas, including candidate work created for the assessment, must be removed once an archive has been made.

If there are issues with the Learner Work Transfer system or if a centre discovers that files have not transmitted using Pearson's Learner Work Transfer, the centre should contact <u>Pearson Customer Support</u> (Tel: 0344 463 2535) as soon as possible.



#### Candidates with Special Requirements

Centres can apply for access arrangements on behalf of a candidate with disabilities and learning difficulties. To request access arrangements, centres are required to use the JCQ Access Arrangements online tool, accessible via Edexcel Online.

In some circumstances, candidates with particular approved requirements may be given additional time to complete the examination.

Candidates who are permitted extra time should be seated where they will not be disturbed by candidates who have completed their examination.

#### **Contingency Measures**

The following contingency measures are strongly recommended:

- Ensure that technical help is available during the examination to deal with computer crashes and other possible complications. Where possible, this should not be the teacher who has taught the candidates.
- If a candidate requires the original coding file, please contact the IT Technician to place the original coding file into the candidate's secure user area. The candidate should continue their examination where possible and return to the question once the file has been placed in the candidate's secure user area.
- Should a candidate require additional time due to the impact of replacing the original coding files, this should be arranged under the same circumstances as detailed in <u>'On the Day of the Examination'</u> section of this document.
- Ensure that several 'spare' computers are available during the examination to allow candidates to move to another machine if necessary.
- If the timetabled examination is scheduled in the morning and there is a power cut, candidates should remain under supervision and under examination conditions until the power is restored. They should be allowed to complete the assessment at a later time within the scheduled examination day e.g. in the afternoon when power is restored.
- If the power is not restored for the whole day, a <u>special consideration</u> request should be submitted for the affected candidates.

#### Malpractice

Centres are required to have in place measures to prevent malpractice. Where malpractice is alleged, observed, or suspected, the incident must be reported to Pearson.

Please see the JCQ Suspected Malpractice Policies and Procedures for more information.

Pearson reserves the right to withhold or adjust marks and grades where malpractice may have affected the integrity of the examination.

Pearson will determine the outcome of any malpractice investigation.

#### Contact Us

Please see our <u>frequently asked questions</u> and if you have any queries about this qualification that require further help of a subject specialist, contact us via <u>Pearson</u> <u>Customer Support</u> (Tel: 0344 463 2535).

Alternatively, you can speak directly to our Computer Science team by phone or email about our qualification.

Tel: UK: 0333 016 4160 Tel Intl: +44 (0)333 016 4160 Email: TeachingComputerScience@pearson.com