Cambridge International AS & A Level

INFORMATION TECHNOLOGY	9626/02
Paper 2 Practical	May/June 2024
	2 hours 30 minutes

You will need: Candidate source files (listed on page 2)

INSTRUCTIONS
● Carry out every instruction in each task.
● Save your work using the file names given in the task as and when instructed.
● You must **not** have access to either the internet or any email system during this examination.
● You must save your work in the correct file format as stated in the tasks. If work is saved in an incorrect file format, you will **not** receive marks for that task.

INFORMATION
● The total mark for this paper is 90.
● The number of marks for each question or part question is shown in brackets [ ].

This document has **4** pages.

[Turn over

You have been supplied with the following source files:

j24audio.mp3
j24customer.csv
j24order.csv
j24stock.csv
j24voice.mp3

You must use the most efficient method to solve each task. All documents produced must be of a professional standard and suit the business context.

You work for Jenna's Jewellery and will design a database about products, customers and their orders.

Note:

- *all dates must be stored and displayed in dd/mm/yyyy format*
- *all currency values must be stored and displayed in pounds sterling (£) to 2 decimal places*
- *all field names must be short and meaningful and contain no spaces.*

1 Open and examine the data in the files:

j24customer.csv
j24order.csv
j24stock.csv

Create a new document. Save this document in **rich text** format with the file name **evidence_** followed by your centre number_candidate number. For example, evidence_ZZ999_9999

Create in your evidence document a conceptual entity relationship diagram to design the database for Jenna's Jewellery.

Save your evidence document.

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2 Open and examine the data of **j24stock.csv**

Create a data dictionary for this data in your evidence document.

Save your evidence document.

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3 Create a relational database normalised to the third normal form (3NF) using your data dictionary and the files opened in step 1. Enforce referential integrity where it is appropriate to do so.

Save your database as **jewel_** followed by your centre number_candidate number. For example, jewel_ZZ999_9999

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4 Create a data entry form so that a new item of stock can be entered into the database.

Save your database.

[6]

5   Open the file **j24audio.mp3** in a suitable audio editing package.

Remove the silence at the start of the clip.

Change the speed of the clip so that it is half (0.5) the original speed.

Mix down the tracks so that the finished soundtrack is monophonic.

Export the file in **.mp3** format as **left_** followed by your centre number_candidate number. For example, left_ZZ999_9999

Make sure that you change the track title to **left** during the export.

Reduce the volume of the track so it is a quarter (0.25) of the original volume.

Export the file in **.ogg** format as **right_** followed by your centre number_candidate number. For example, right_ZZ999_9999

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6   Open the file **j24voice.mp3** in a suitable audio editing package.

Add reverb to the clip so that it sounds like the voice is echoing in a room.

Lengthen this track so that the voice starts after 10 seconds.

Export the file in **.mp3** format as **voice_** followed by your centre number_candidate number. For example, voice_ZZ999_9999

[3]

7   Open the file **left** saved in step 5.

Fade out the track between 5 and 10 seconds.

Mute the sound between 10 and 18 seconds.

Fade in the track between 18 and 23 seconds.

Add the voice track, saved in step 6, and mix down these tracks into a single mono track. Set this as the left track and use the file **right**, saved in step 5, as the right track of your stereo output.

Set a 2-second fade-out on both tracks starting at 25 seconds. Trim the clip to 27 seconds.

Export the file in **.mp3** format as **jewel_** followed by your centre number_candidate number. For example, jewel_ZZ999_9999

[7]