



Cambridge International AS & A Level

INFORMATION TECHNOLOGY

9626/04

Paper 4 Advanced Practical

May/June 2022

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 **8** pages.

You have been supplied with the following source files:

MarchMerits.csv
Merits.csv
Scene1.png
Sunset.jpg

Create a folder called **Examination**. You must save all your work in this folder.
 Copy these files into this folder.
 Do **not** delete these files when submitting your work.

You must use the most efficient methods to solve each task. All work produced must be of a professional standard and contain your candidate details.

Task 1

Open **Scene1.png** in a graphics application.



Extract a copy of only the balloon.

The size of the image of the balloon must be 3000 pixels wide by 2250 pixels high.

The balloon must have a transparent background.



Save the image as **Balloon1_** followed by your centre number_candidate number
 e.g. Balloon1_ZZ999_9999



Repair the sky and save a copy of the scene without the balloon.

Save the image as **Scene2_** followed by your centre number_candidate number
 e.g. Scene2_ZZ999_9999

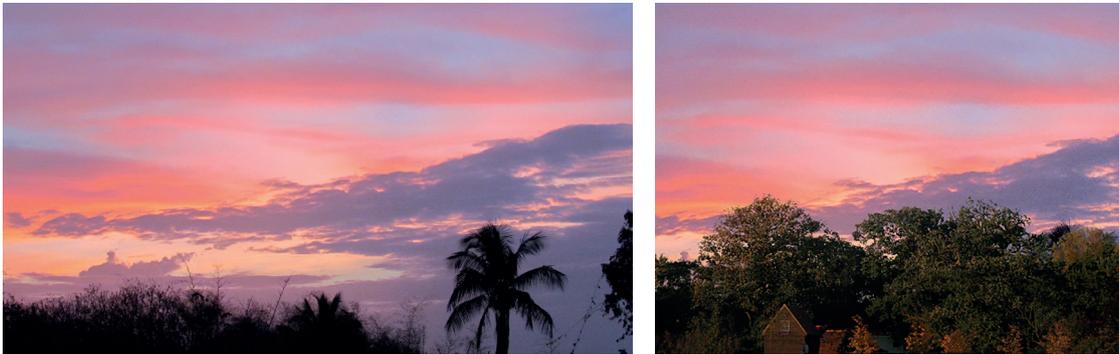
Without cropping, remove all traces of the posts, fence and wires that are shown in the *Scene2_* image.



Save the complete image as **Scene3_** followed by your centre number_candidate number
e.g. Scene3_ZZ999_9999

Open **Sunset.jpg** in a graphics application.

Replace all the sky in your *Scene3_* image with a suitable section of the sky shown in the *Sunset.jpg* image.



Save the image as **Scene4_** followed by your centre number_candidate number
e.g. Scene4_ZZ999_9999

[25]

Task 2

Create a vector graphic image of this balloon.

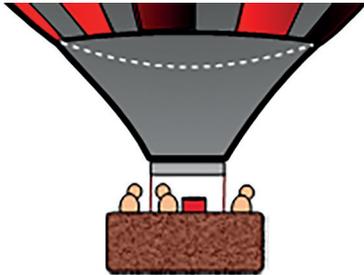
Use your *Balloon1_* image as a template for the proportions of the balloon and the size and positions of the panels.

Use gradient fills to create the impression of curves in the balloon, the panels and the text.

Make sure the proportions of the basket and the passengers match those shown in this image.



Make sure the basket has a pattern fill.



Save the image as a **scalable vector graphic** (.svg) as **Balloon2_** followed by your centre number_ candidate number
e.g. Balloon2_ZZ999_9999

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Task 3

Students at Tawara High School can be awarded Merits for good performance or Demerits for poor performance in these 5 categories:

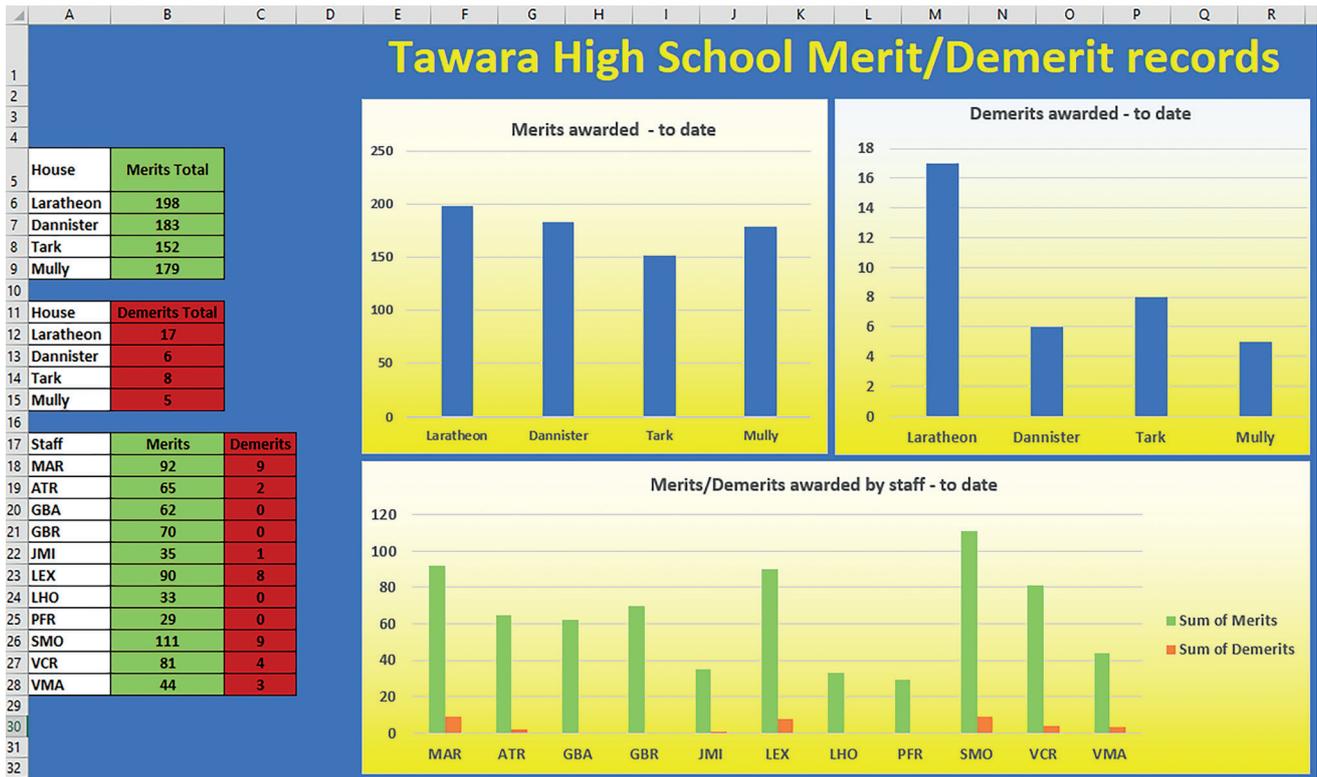
- Academic
- Behaviour
- Arts
- Social
- Sports.

All students are members of one of four Houses:

- Laratheon
- Dannister
- Tark
- Mully.

The Merits.csv file contains details of the Merits and Demerits awarded to students in January and February 2022.

Open and examine **Merits.csv** and use this to create a spreadsheet as a dashboard to look like this:



Note: The totals and values shown in the examples are not correct for the data in the source file.

The dashboard must display tables and charts as shown in these examples:

Example 1

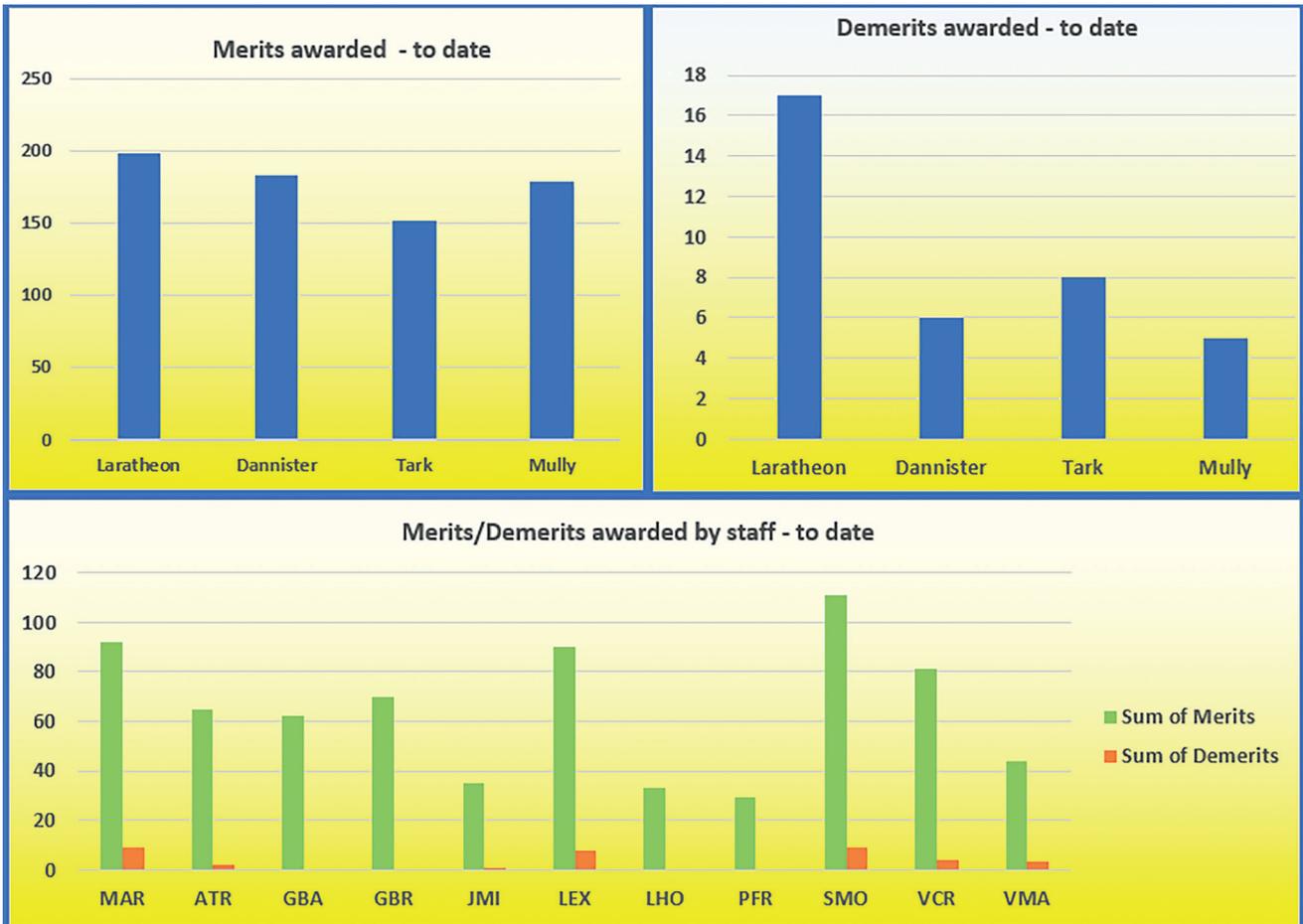
Tables showing the number of Merits and Demerits awarded to each house and the number awarded by each member of staff.

House	Merits Total	
Laratheon	198	
Dannister	183	
Tark	152	
Mully	179	
House	Demerits Total	
Laratheon	17	
Dannister	6	
Tark	8	
Mully	5	
Staff	Merits	Demerits
MAR	92	9
ATR	65	2
GBA	62	0
GBR	70	0
JMI	35	1
LEX	90	8
LHO	33	0
PFR	29	0
SMO	111	9
VCR	81	4
VMA	44	3

These tables must be dynamic.

Example 2

Charts showing the number of Merits and Demerits awarded to each house and the number awarded by each member of staff.



Note: The totals and values shown in the examples are not correct for the data in the source file.

Set:

- all text as sans-serif
- all text as bold
- the dashboard heading to 36pt
- the chart headings to 14pt
- all other text to 12pt
- the dashboard background, table and chart columns to the colours shown
- each chart background with a yellow gradient fill.

Save the workbook as **JanFebMerits_** followed by your centre number_candidate number
e.g. JanFebMerits_ZZ999_9999

[25]

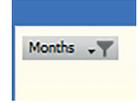
Please turn over for Task 4

Task 4

Update the *JanFebMerits* data with the records in the **MarchMerits.csv** file.

Save the workbook as **Merits_1stQuarter2022_** followed by your centre number_candidate number e.g. **Merits_1stQuarter2022_ZZ999_9999**

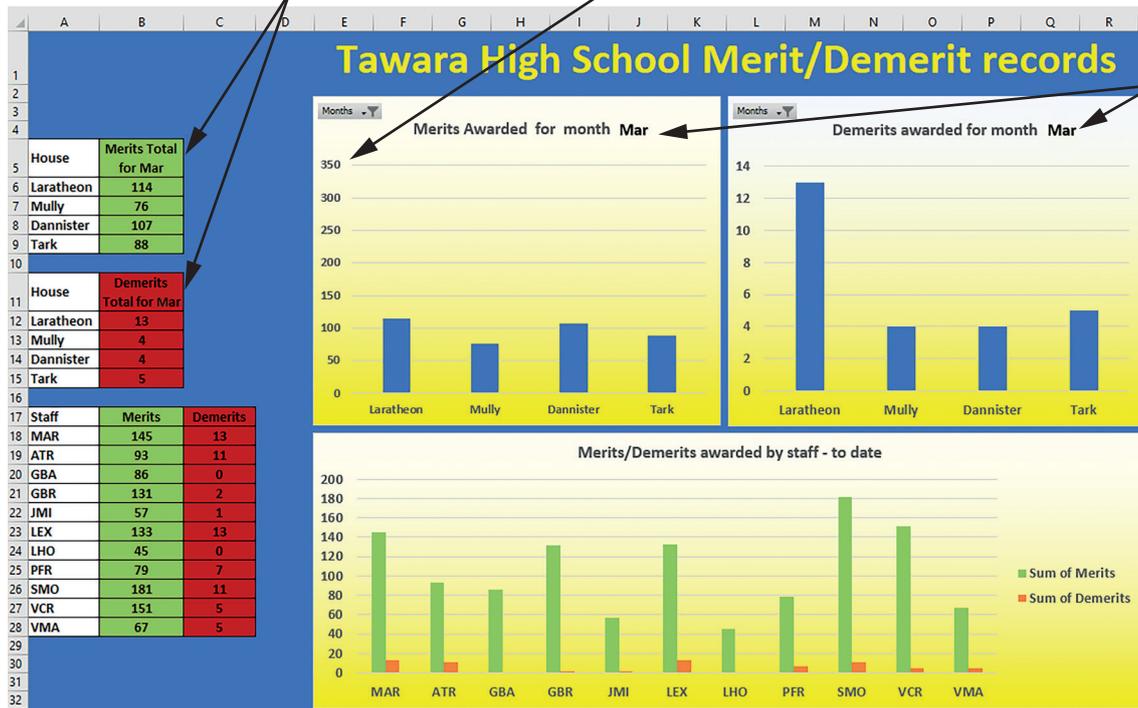
Amend the dashboard so that users may select to view the Merits and Demerits data for individual months or the totals for all months.



The month selected must be automatically displayed in these tables.

The vertical axis for the Merits chart must be fixed as 0 – 350.

The monthly data selected must be automatically displayed on the charts.



Note: The totals and values shown in the example are not correct for the data in the source file.

Resave your workbook.

[15]

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