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Cambridge Assessment International Education

Cambridge International AS & A Level

INFORMATION TECHNOLOGY **9626/04**

Paper 4 Advanced Practical **February/March 2023**

2 hours 30 minutes

7560506918

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. Any blank pages are indicated.

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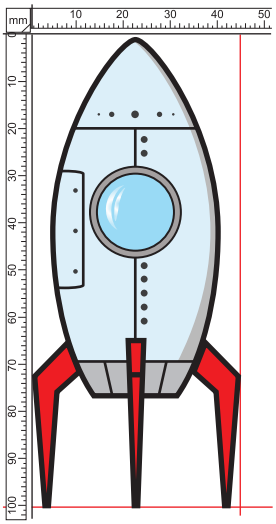
You have been supplied with the following source files:
Stars.svg
Gantry.svg
Sales.ods
JS Task.html

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.

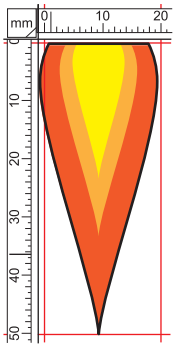
Task 1 – Vector graphics



Create an accurate copy of this spaceship.

Make sure you match the proportions and details very closely.
The rulers and guidelines shown are for information only.

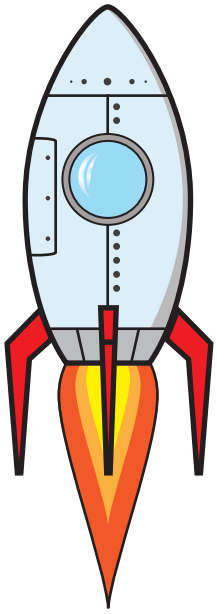
Save the image as an **svg** file named **SpaceShip_** followed by your centre number_candidate number
e.g. SpaceShip_ZZ999_9999



Create a copy of this rocket burner flame.

Make sure you match the proportions and details very closely.
The rulers and guidelines shown are for information only.

Save the image as an **svg** file named **Flame_** followed by your centre number_candidate number
e.g. Flame_ZZ999_9999



Combine the images to create a copy of this image.

Make sure you match the proportions and details very closely.

Save the image as an **svg** file named **Rocket_** followed by your centre number_candidate number
e.g. Rocket_ZZ999_9999

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Task 2 – Animation

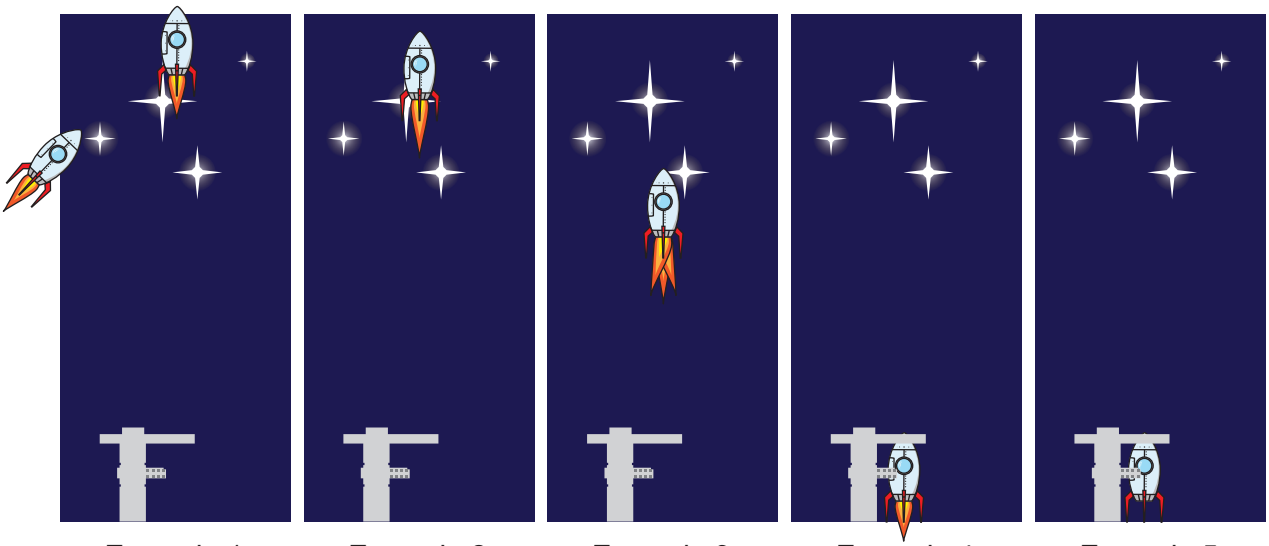
Create an animation of your *SpaceShip* landing.

Set a frame/stage size of 900 pixels high and 400 pixels wide.

Set the colour of the stage to dark blue (#000033).

Add the **Stars.svg** and the **Gantry.svg** images to create the stage exactly as shown.
Note: The spaceship travels in front of the Stars and stops behind the Gantry.

Use the images you created in task one to create the following sequence.



Example 1 Example 2 Example 3 Example 4 Example 5

The spaceship must enter the stage from the left as shown and take 1 second to rise above the top of the frame.
Make sure you match the size of the spaceship, the size of the flame and their positions as shown in Example 1.

The spaceship must then take 4 seconds to descend smoothly with the flames changing as shown in Examples 2, 3 and 4.
Note: the size of the flame in each example.

1 second after the spaceship has landed the flame must disappear as shown in Example 5.

Save your animation as an **animated gif** file named **Landing_** followed by your centre number_ candidate number
e.g. Landing_ZZ999_9999

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Task 3 – Spreadsheet Challenge

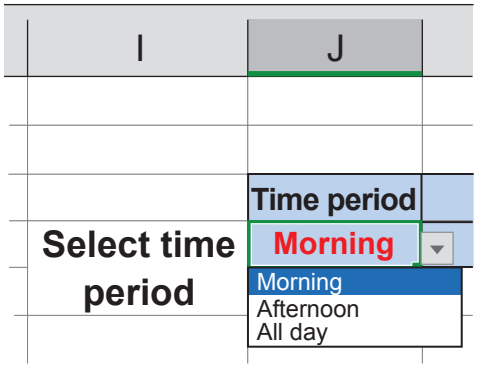
(a) Open **Sales.ods** in a spreadsheet application.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1															
2															
3										Time period	Day				
4			Mon	Tue	Wed	Thu	Fri		Select time period	Morning	Mon	Tue	Wed	Thu	Fri
5		8 AM	8	10	12	12	10			Sales					
6		9 AM	9	10	10	11	9								
7	Morning	10 AM	8	6	5	7	6								
8		11 AM	7	6	5	5	4								
9		12 PM	8	6	9	8	7								
10		1 PM	10	11	8	9	7								
11		2 PM	2	4	4	6	5								
12	Afternoon	3 PM	2	0	2	0	0								
13		4 PM	3	4	3	2	0								
14		5 PM	2	0	1	0	0								
15															

Name the ranges as shown here.

Name	Range
data	C5:G14
times	B5:B14
days	C4:G4

In cell J4 add a drop down list to select a time period as shown.



In cells K5:O5 add formulas to calculate the total sales for the time period selected from the drop down list.

For example:

I	J	K	L	M	N	O
	Time period	Day				
Select time period	Afternoon	Mon	Tue	Wed	Thu	Fri
	Sales	19	19	18	17	12

I	J	K	L	M	N	O
	Time period	Day				
Select time period	All day	Mon	Tue	Wed	Thu	Fri
	Sales	59	57	59	60	48

Rename the worksheet **SelectPeriod**

Save your workbook as a spreadsheet named **SalesData_** followed by your centre number_ candidate number
e.g. SalesData_ZZ999_9999

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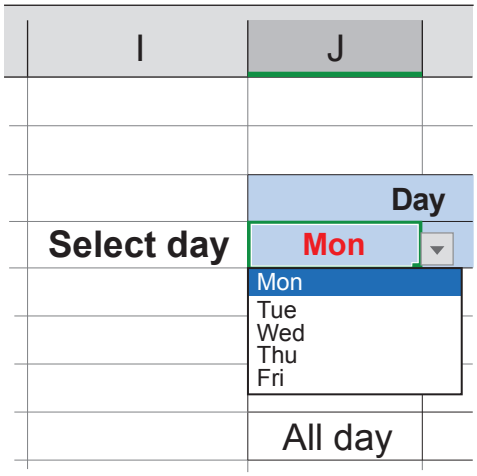
(b) Copy cells A1:G14 to a new worksheet in the same workbook.
Rename the worksheet **SelectDay**

Edit and format the worksheet to look like this:

	A	B	C	D	E	F	G
4			Mon	Tue	Wed	Thu	Fri
5	Morning	8 AM	8	10	12	12	10
6		9 AM	9	10	10	11	9
7		10 AM	8	6	5	7	6
8		11 AM	7	6	5	5	4
9		12 PM	8	6	9	8	7
10	Afternoon	1 PM	10	11	8	9	7
11		2 PM	2	4	4	6	5
12		3 PM	2	0	2	0	0
13		4 PM	3	4	3	2	0
14		5 PM	2	0	1	0	0

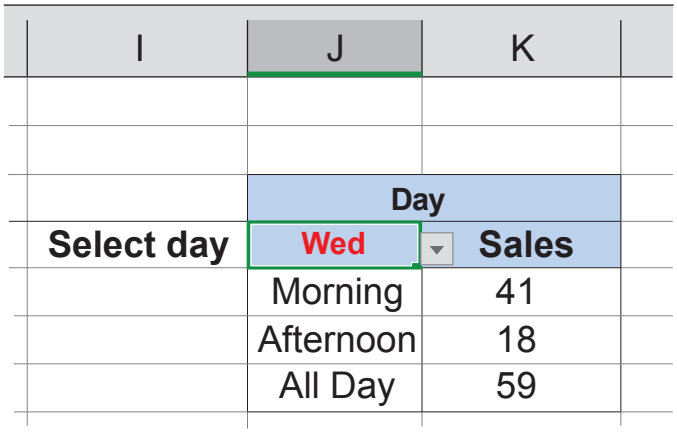
SelectPeriod SelectDay

In cell J4 add a drop down list to select the day.



In cells K5:K7 add formulas to calculate the total sales for each period of the selected day.

For example with Wednesday selected it will look like this:



Re-save your workbook.

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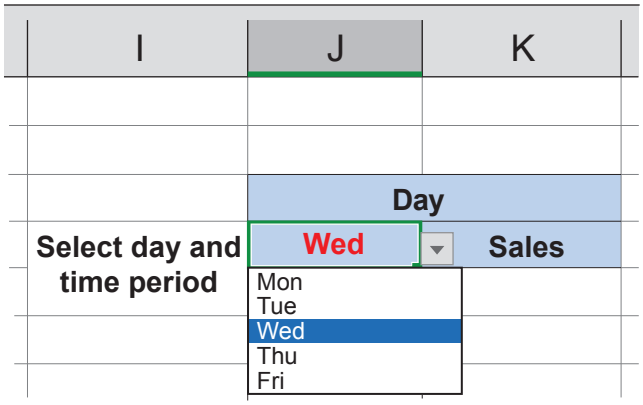
(c) Copy cells A1:G14 to a new worksheet in the same workbook.
Rename the worksheet **SelectAll**

Edit and format the worksheet to look like this:

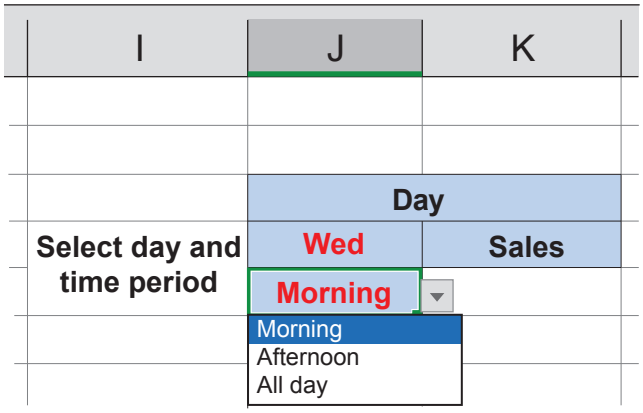
	A	B	C	D	E	F	G
4			Mon	Tue	Wed	Thu	Fri
5	Morning	8 AM	8	10	12	12	10
6		9 AM	9	10	10	11	9
7		10 AM	8	6	5	7	6
8		11 AM	7	6	5	5	4
9		12 PM	8	6	9	8	7
10	Afternoon	1 PM	10	11	8	9	7
11		2 PM	2	4	4	6	5
12		3 PM	2	0	2	0	0
13		4 PM	3	4	3	2	0
14		5 PM	2	0	1	0	0

SelectPeriod | SelectDay | SelectAll

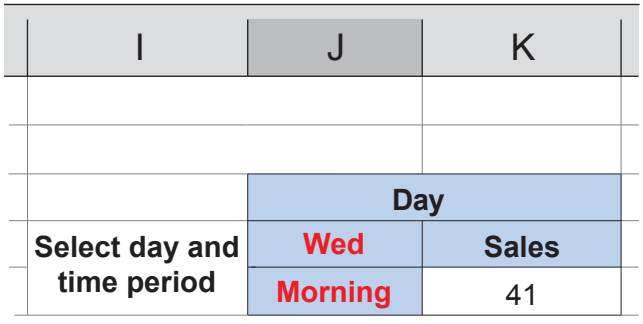
In cell J4 add a drop down list to select the day.



In cell J5 add a drop down list to select the time period.



In cell K5 add a formula to calculate the total sales for the selected time period of the selected day.



Re-save your workbook.

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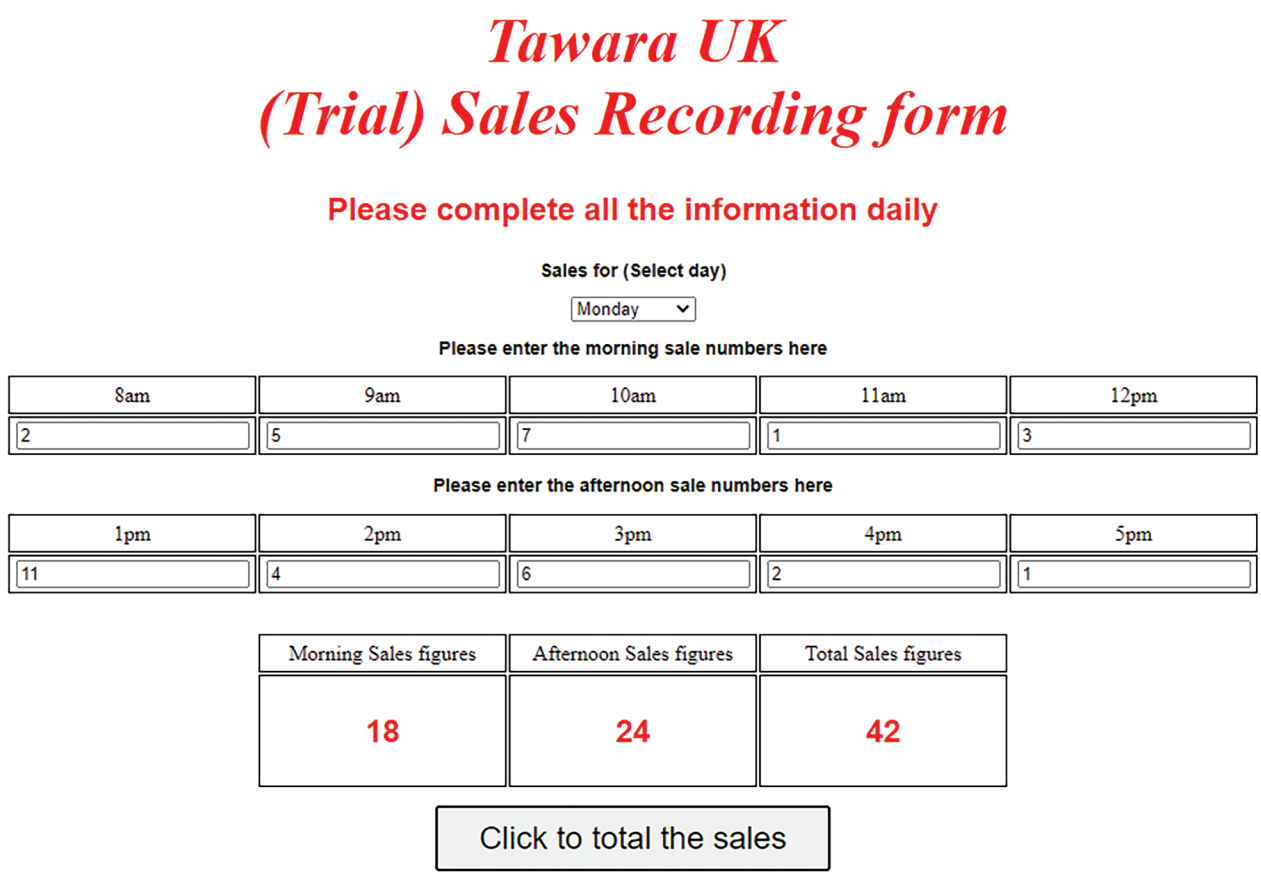
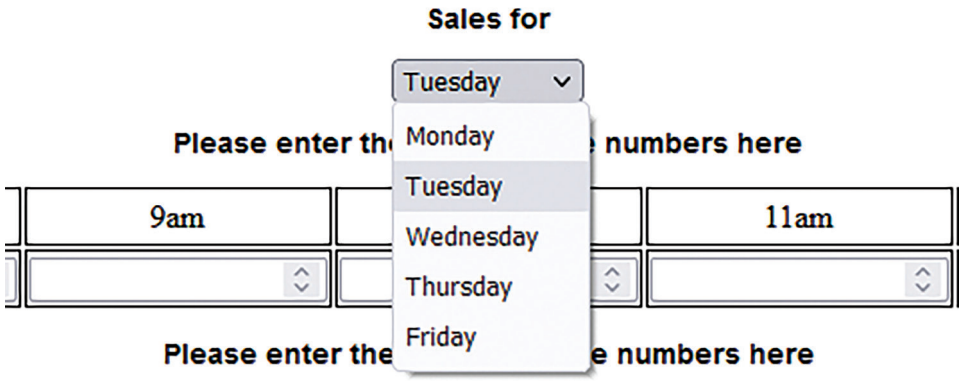
Task 4

Open **JS Task.html** in both a browser and in a text editor.

Amend the “Click to total the sales” <button …> code and add JavaScript so that when the button is clicked the total sales recorded for each time period are displayed in the cells as shown:



Amend the selection code and add JavaScript so that when a new day is selected the data in all the cells is cleared.



Save the web page as **SalesForm_** followed by your centre number_candidate number e.g. SalesForm_ZZ999_9999.html

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