T Level Technical Qualification in Digital Production, Design and Development (Level 3)

**18 November 2021** 

**Controlled hours** 4 hours

Paper reference

19538

Core

**Employer Set Project** 

**TASK 4a:** Developing a solution

You must have:

Task\_4a\_data.csv, Task4a\_sales\_dashboard.py

# Information

- This booklet contains material for the completion of the set task under supervised conditions.
- This booklet is specific to each series and this material must only be issued to students who have been entered to undertake the task in the relevant series.
- This booklet must be kept securely until the start of the timetabled assessment.

Turn over ▶







## **Instructions for students**

You must complete the activity within the assessment.

The task must be undertaken at the time and on the date specified by Pearson.

You will be given four hours for producing the outcomes for this task.

Your centre will advise you of when any supervised breaks have been scheduled.

The task must be completed under supervised conditions.

You are not permitted access to the internet during this task.

You are provided with these files for use during this task:

- Task\_4a\_data.csv
- Task4a\_sales\_dashboard.py

Your work and any material provided must be kept securely at all times.

#### Set task brief

In Task 3 you produced design ideas for the daily sales value part of the solution. Your design ideas have been reviewed by your manager.

A senior developer has coded the solution and your manager has presented it to NTEM Sales Services.

Since then, NTEM Sales Services has requested some additional functionality to be added to further develop the solution.

# **Activity**

The file Task\_4a\_data.csv contains the data that will be used by the solution.

The file Task4a\_sales\_dashboard.py contains the code that the senior developer has produced.

Develop the programming code for the data service so that it meets the new system and user requirements provided in the Set task information.

During development of the solution make sure that you:

- consider the security requirements and use secure coding principles and practices to mitigate against potential threats and vulnerabilities
- ensure that your code is maintainable, readable and functional
- follow accepted programming conventions.

During this task you do not need to formally document your testing.

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### **Outcomes for submission**

Save your code as PDFs and as .txt files.

Save a working version of your solution as a .py file.

All files should be saved in your folder for submission.

Use these naming conventions:

- Task4acode [doc#] [Registration number] [surname] [first letter of first name]
- You may use any appropriate folder structure and naming convention to save the working version of the solution.

## **Set task information**

NTEM Sales Services has provided the new system requirements. These are:

- the existing code provided allows users to select a salesperson and show the value of sales made over a period of time
- the solution must also identify trends and patterns over a period of time for:
  - the value of sales for different regions
  - the employees with the highest sales values
- the solution must be secure.

NTEM Sales services has also provided user requirements for the solution. These must:

- be easy to use
- display information in a meaningful way
- make use of appropriate textual, numerical and graphical output in a way that would be relevant to the end user.