# PEARSON

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

## Friday 22 November 2024

**Time** 3 hours

**Paper reference** **19538**

# Core: Employer Set Project
## Task 2
## Identifying and fixing defects in an existing code

**You must have:**
Task2_Test_Log_Template.docx, Task2_NonWorkingCode.txt.

## 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.

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*Continue* ▶

## Instructions for Students

**You must complete ALL parts of the activity within the assessment.**

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

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

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

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

You are permitted to use **offline** versions of relevant software to produce evidence for this task.

Files provided for use during this activity:

• Task2_Test_Log_Template.doc

• Task2_NonWorkingCode.txt

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

## Set Task Brief

You are a member of the programming team that is developing a program to meet the requirements in the Set Task Information.

Your manager has asked you to look at some code that a Junior Software Developer has produced but that is not yet functional. The code that is not yet functioning is provided for you in the *Task2_NonWorkingCode.txt* file.

The code should meet the requirements in the Set Task Information.

### Activity

You will need to use:

- the information provided in the Set Task Information

- the non-functioning code provided in the file *Task2_NonWorkingCode.txt*.

You must:

- produce and apply a test plan to identify the defects that are preventing the program code in the file *Task2_NonWorkingCode.txt* from functioning

- apply a solution to fix the defects in the program code provided

- document the process that you followed to fix the code.

When applying a solution to fix the defects you must:

- ensure the code meets the requirements in the Set Task Information

- use the Python 3 programming language

- follow accepted programming conventions

- test your solution to ensure that it functions as expected.

Two files are provided for use during this activity:

- *Task2_Test_Log_Template.doc*

- *Task2_NonWorkingCode.txt*

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### Outcomes for submission

Save your code as PDF files **and** as .txt files.

Save your testing document as a PDF file.

All files should be saved in your folder for submission.

Use this naming convention:

Task2code_[doc #]_[Registration number]_[surname]_[first letter of first name]

Task2_Test_Log_[Registration number]_[surname]_[first letter of first name]

## Set Task Information

Versere Cars has provided you with this information to develop the program.

### Requirements

The program will be part of the new system's *Sales Management* module.

The program will calculate the commission and bonus payments to be paid to a salesperson each month.

The new system must allow the user to enter this information:

- Sales details:

  - name of salesperson

  - employee's ID number

  - number of cars sold

  - the price of each car sold

The program should then provide the user with a summary of the salesperson's performance.

The summary should show:

- salesperson's details

- number of cars sold

- total value of all cars sold

- commissions and bonuses earned

- today's date.

The program should output the summary to the screen and to a text file.

The information should be formatted appropriately.

The program should be able to handle user errors.

### Employee ID

Must be 8 numbers long.

### Commission

Salespersons earn a commission of 5% of the total value of cars they have sold.

### Bonuses

- £500 if six or more cars sold.

- An additional 4% of the total value, if the total value of cars sold is £135 000 or more.