T-LEVELS | ✿ Institute for Apprenticeships & Technical Education

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

11 November 2021

Controlled hours 3 hours

Paper reference **19538**

Core

Employer Set Project

TASK 2: Identifying and fixing defects in an existing code

You must have:
Task 2_Test_Log_Template.doc, Task2_NonWorkingCode.txt
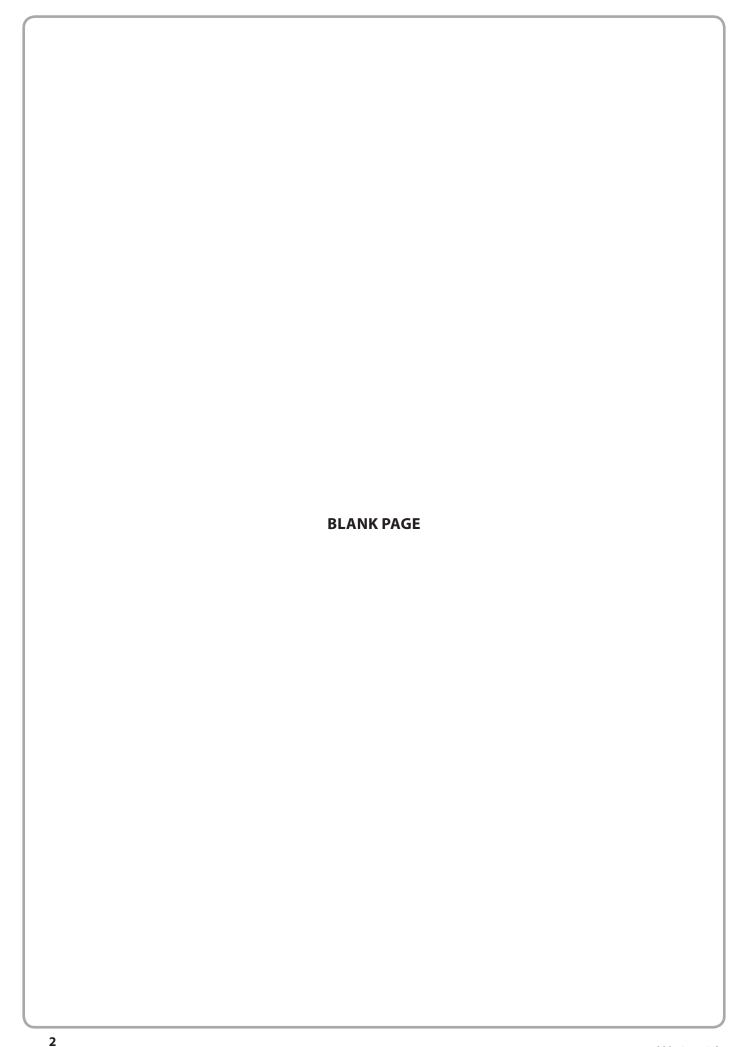
Information

- 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.

Turn over ▶

Pearson

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Instructions for students

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

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

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

Your centre will advise you of when 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 permitted to use offline versions of relevant software to produce evidence for this task.

Files provided for use during this activity:

- Task 2_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 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 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:

- Task 2_Test_Log_Template.doc
- Task2_NonWorkingCode.txt.

(21 Marks)

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 these naming conventions:

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

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

Set task information

NTEM Sales Services has provided you with this information to develop your program.

Requirements

You need to create a program that will be part of the company's sales system.

The program should also be able to list current stock and all the recorded sales by allowing the input of:

- sales information:
    - customer name
    - company name
    - product required
    - quantity required
- stock information:
    - product name
    - price
    - number in stock.

The program should then provide the user with a summary of the sale that shows:

- customer name
- company name
- date
- total number of each product ordered
- itemised cost
- subtotal
- any discount applied
- final total (after discount).

The program should output the summary of the sale to the screen.

Values should be formatted as currency (GBP) to 2 decimal places.

The program should be able to handle user errors.

Discount

5%, if five or more products are purchased.