Level 3 Develop software using COBOL (7266/7267-303)

e-Quals
Assignment guide for Candidates
Assignment B

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City & Guilds
1 Giltspur Street
London EC1A 9DD
T +44 (0)20 7294 2800
F +44 (0)20 7294 2400
www.cityandguilds.com
learnersupport@cityandguilds.com

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Introduction – Information for Candidates

About this document
This assignment comprises part of the assessment for Level 3 Develop software using COBOL (7266/7267-303).

Health and safety
You are asked to consider the importance of safe working practices at all times.

You are responsible for maintaining the safety of others as well as your own. Anyone behaving in an unsafe fashion will be stopped and a suitable warning given. You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements. This may seem rather strict but, apart from the potentially unpleasant consequences, you must acquire the habits required for the workplace.

Time allowance
The recommended time allowance for this assignment is **4 hours**.

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Candidate instructions

Candidates are advised to read **all instructions** carefully before starting work and to check with your assessor, if necessary, to ensure that you have fully understood what is required.

Time allowance: 4 hours

Assignment set up: A scenario is provided for candidates in the form of a company specification for a new product.

This assignment is made up of **three** tasks

- **Task A** - provides a detailed design specification that should be followed by candidates when developing their program.
- **Task B** - requires the candidate to test the program that they have created and provide documentation.
- **Task C** - provides criteria that should be followed by candidates when producing their work.

Scenario

A company, Quality DIY, need software developed to hold information about stock. As a contracted employee of Quality DIY, you have been asked to design, create and test a program to create and maintain stock records.

Task A

Candidates should use the following detailed specification to fulfil the company's requirements:

In this task you are required to design and create a program from the design details given.

1 The records are to be held in an indexed sequential file where the record key is the Stock number and the fields are as shown below:

Name	Type	Length
Stock number	Numeric	4
Description	Alphanumeric	20
Pack	Numeric	3
Quantity in stock	Numeric	4
Price	Numeric	6 including 2 decimal places

2 The program should display a menu similar to the following:

MENU	
1	Add a record
2	Amend a record
3	Delete a record
4	Print all records
5	Quit

3 An EVALUATE statement must be used for the menu option input.

4 The INVALID KEY clause must be used when accessing the indexed sequential file.

5 Create the design for the program including screen input and printed output layouts.

6 Write the code to implement the design.

Task B

In this task you are required to test the program you have created and provide documentation.

1 Prepare a test plan, test data and expected results.

2 Test the software; check the expected results against the actual results keeping a log for each test which identifies any discrepancies between actual and expected results and records any amendments made to resolve any logical or run-time errors found.

3 Produce the end user instructions.

4 Print a listing of the code.

Task C

Candidates should follow the criteria below when producing their work:

1 The program conforms to the design specification.

2 The program is structured.

3 Meaningful names are used for user-defined elements.

Note

- Candidates should produce the following for their assessor:
  - Design documentation.
  - Printed program listing.
  - Test plan, test data and expected results and test log.

    - End user instructions.
- At the conclusion of this assignment, hand all paperwork and removable media to the test supervisor.
- Ensure that your name is on the removable media and all documentation.
- If the assignment is taken over more than one period, all removable media and paperwork must be returned to the test supervisor at the end of each sitting.

Published by City & Guilds
1 Giltspur Street
London
EC1A 9DD
T +44 (0)20 7294 2468
F +44 (0)20 7294 2400
www.cityandguilds.com

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