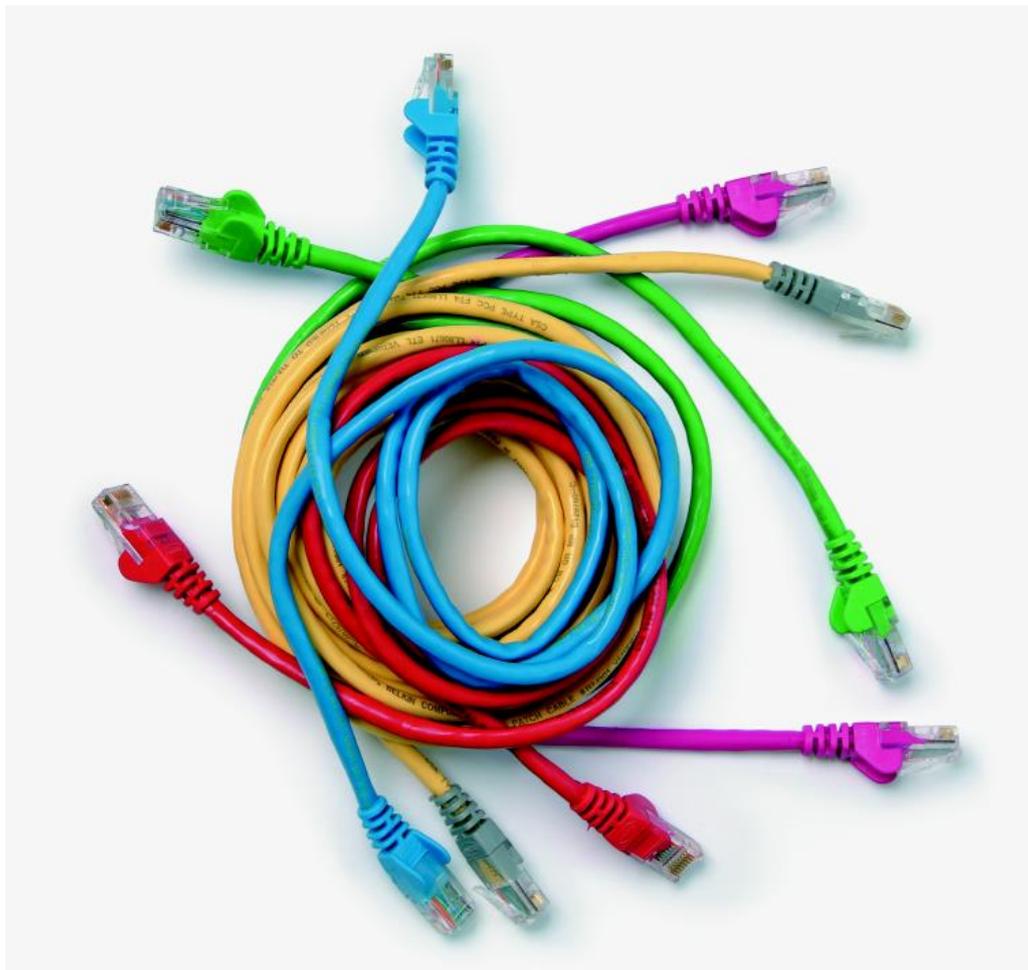


# Level 2 Creating a procedural computer program using COBOL (7540-005)

## Assignment guide for Candidates Assignment B



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# **Level 2 Creating a procedural computer program using COBOL (7540-005)**

## **Assignment B**

### Introduction – Information for Candidates

#### **About this document**

This assignment comprises all of the assessment for Level 2 Creating a procedural computer program using COBOL (7540-005).

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#### **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.

# Level 2 Creating a procedural computer program using COBOL (7540-005)

## 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 two tasks

- **Task A** - provides a detailed design specification that should be followed by candidates when developing their program.
- **Task B** - provides presentation criteria that should be followed by candidates when producing their work.

## Scenario

A software development company, Fortune Designs, develop software for clients. As a contracted employee of Fortune Designs, you have been asked to create and test a program to read data from a sequential sales transaction file and produce printed output.

### Task A

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

In this task you will read sales transaction records from a sequential file and use the records to create printed output for a sales report.

The table below shows the fields in the sales transaction file.

Name	Type	Length
Branch number	Numeric	2
Product number	Numeric	5
Description	Alphanumeric	20
Quantity	Numeric	5
Product Total Value	Numeric	9 including two decimal places

Some example data for the sales transaction file, which you must create, is shown below:

0100010Carver chair	00002000063165
0100015Round table	00001000156545
0200010Carver chair	00004000126330
0200012Coffee table	00001000007599
0300016Coffee table	00001000015599

The sales transaction records must be created in ascending order of product number within branch number. The fields in the file are fixed length. There is only one sales transaction record for any particular product at any branch.

The data for the file can be created using a text editor. Each record should be terminated by pressing the ENTER key.

**1 Design a layout for a sales report that must show the sales transaction records. The report must contain the following:**

- **A heading at the top of each page which includes the branch number and a page number.**
- **Each detail line should show the Product number, Description, Quantity and Product Total Value for a product.**
- **Each branch must be on a new page.**
- **If details for a branch overflow one page then a new heading for that branch must be printed on the new page.**
- **The total value of all transactions for a branch should be printed at the end of each branch's sales transactions.**
- **The grand total of all sales transactions for all branches should be printed at the end of the sales report.**

2 Write the code to read the sales transaction file and produce the sales report.

3 Create test data and determine the expected results.

4 Test the program and compare the actual results to the expected results and correct any errors found. Provide evidence that the program works correctly ie printed sales reports, file prints.

5 Use available debugging tools to help locate and resolve errors.

6 Print a listing of the code.

## **Task B**

*Candidates should follow the criteria below when producing their work:*

- 1 The program conforms to the design specification.**
- 2 The program uses the most appropriate data type(s).
- 3 Meaningful names are used when declaring variables.
- 4 The program syntax is consistently indented to aid readability.
- 5 The program is commented.

## **Note**

- Candidates should produce the following for their assessor:
  - Printed program listing.
  - Sales report layout.
  - Test data, expected results and evidence that the program works correctly ie printed sales report, file prints.
- 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.

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