



National 5
Coursework
Assessment Task



National 5 Computing Science Assignment Assessment task Task 2: software design and development (part B)

This document provides information for teachers and lecturers about the coursework component of this course in terms of the skills, knowledge and understanding that are assessed. It must be read in conjunction with the course specification.

Valid for session 2019-20 only.

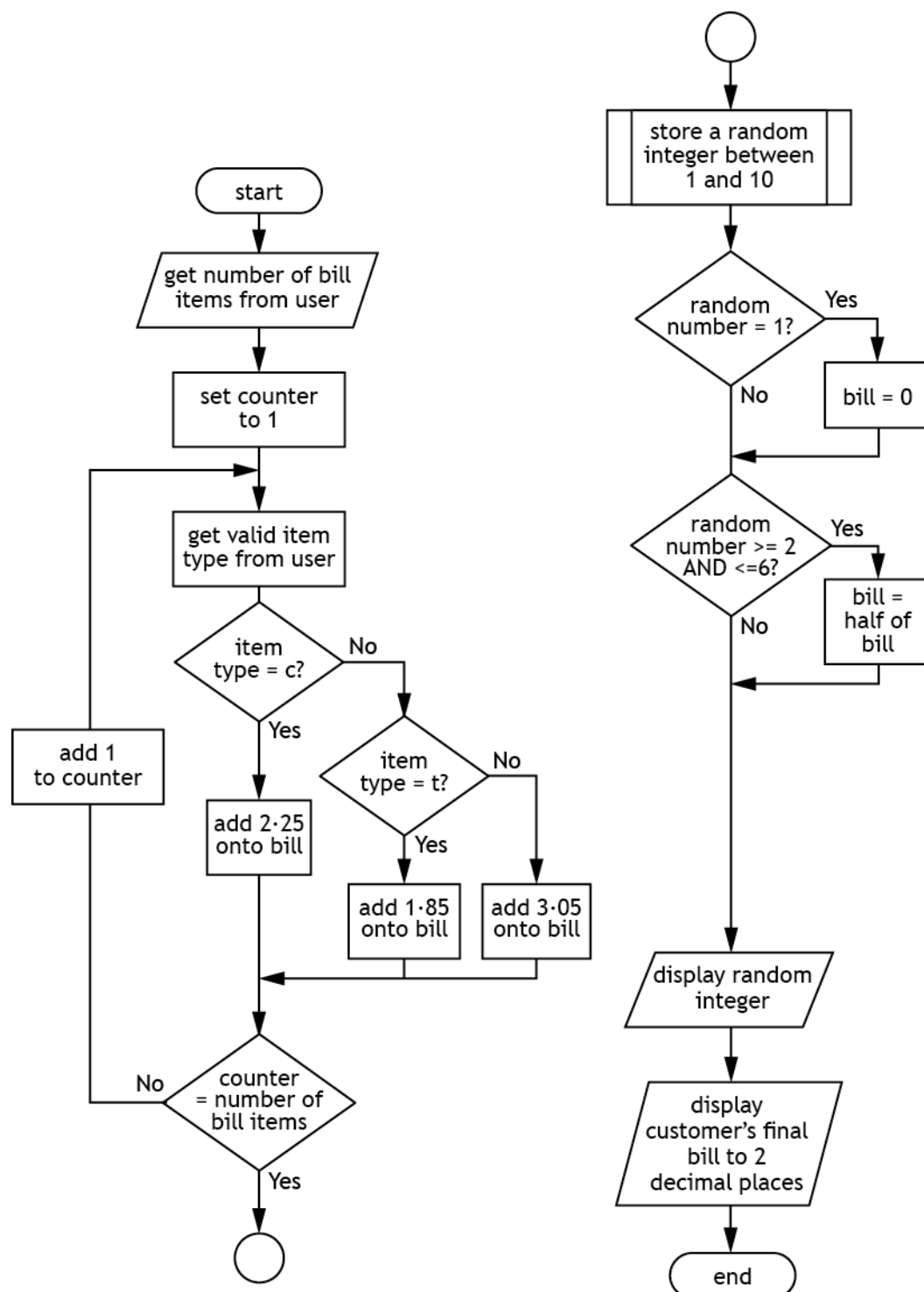
This assessment is given to centres in strictest confidence. You must keep it in a secure place until it is used.

This edition: January 2020 (version 1.0)

© Scottish Qualifications Authority 2020

Task 2: software design and development (part B)

Program design (completed flowchart)



- 2b Using the program analysis and the design, implement the program in a language of your choice.

Ensure the program matches the flowchart provided on page 17.

(15 marks)

Print evidence of your program code.

- 2c (i) Your program should be tested to ensure it produces one of three different random outputs.

Use the following data to do this:

Number of items: 4

Item 1: coffee

Item 2: tea

Item 3: tea

Item 4: biscuit

State the possible values (outputs) for the final bill produced from this test data.

--

Run your program to show that it produces one of these three outputs.

Print evidence of the test run showing inputs and outputs.

(2 marks)

- (ii) Complete the test table below to check the validation for the item type.

Type of test	Test data	
Normal	Number of items - 3	c, t, b
Exceptional	Number of items - 1	

Run your program to show the result of the exceptional test data.

(1 mark)

Print evidence of the test run.

Candidate name _____ Candidate number _____

2d With reference to your code, evaluate your program by commenting on the following:

Efficiency of your program code	(2 marks)
Robustness of your completed program	(1 mark)
Readability of your code	(1 mark)

Candidate name_____ Candidate number_____