

5 A software developer follows a program development life cycle. The life cycle divides the development process into various stages.

(a) The following table lists some development activities.

Complete the table by writing the name of the life cycle stage for each activity.

Activity	Name of life cycle stage
The walkthrough method is used.	
An algorithm is implemented in a programming language.	
The client is interviewed about problems with the current system.	
The program is modified to run on new hardware.	
Records and file structures are defined.	

[5]

(b) The program contains a validation function.

(i) The function will:

- take an integer value as a parameter
- return `TRUE` if the value is within the range 24 to 37, inclusive
- otherwise return `FALSE`.

Complete the table to define a test plan to thoroughly test the operation of the function.

Type of test data	Test data value	Expected result
Normal	30	TRUE

[4]

(ii) The function is to be tested on its own. When it is shown to work correctly the function will be combined with other modules and testing will continue.

Identify the type of testing that this represents.

..... [1]