

🕒 12 mins 🗋️ 4 questions

Exam Questions

# Program Development Life cycle

Development models

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

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.	

## Answer



### Mark Scheme and Guidance

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

One mark per row

**(5 marks)**

- 2** A program has been developed and released for general use. After a few months of use an error is detected where under certain circumstances it outputs an unexpected value.

The error in the program needs to be corrected.

Identify the stage of the program development life cycle that this correction is made in.

### Answer



### Mark Scheme and Guidance

(Corrective) Maintenance

**(1 mark)**

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

The following table lists some development activities.

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

<b>Activity</b>	<b>Name of life cycle stage</b>
A compiler is used.	
A program that has been released for general use is modified.	
The dry run method is used.	
The program structure is specified.	

### Answer



### Mark Scheme and Guidance

<b>Activity</b>	<b>Name of life cycle stage</b>
A compiler is used.	<b>Coding</b>
A program that has been released for general use is modified.	<b>Maintenance</b>
The dry run method is used.	<b>Testing</b>
The program structure is specified.	<b>Design</b>

One mark per row

**(4 marks)**

4 A coffee shop owner wants to introduce a computerised loyalty card system.

A programmer discusses the details of the system with the shop owner.

Identify the stage of the program development life cycle that this discussion is part of and give a document that will be produced during this stage.

## Answer



### Mark Scheme and Guidance

One mark per answer:

**MP1** Analysis

**MP2 Named** document, examples include:

- A requirement specification
- Definition of System Objectives
- List of problems with existing system
- Survey results
- Feasibility study
- Interview notes

**Max 2 marks**

**(2 marks)**