

1.2 SOFTWARE & SOFTWARE DEVELOPMENT · 1.2.2

Translators & the stages of compilation

Original practice questions · 35 marks · about 45 minutes · spec 1.2.2(d)(e)(f)

Instructions. Answer all questions. The number of marks is shown in brackets []. Quality of written communication is assessed in the extended-response question.

1 Total: 4 marks

This question is about translators.

(a) State the purpose of a translator. [1]

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(b) Name the **three** types of translator. [3]

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2 Total: 6 marks

This question is about compilers and interpreters.

(a) Explain **two** differences between a compiler and an interpreter. [4]

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(b) Give one advantage of using a compiler rather than an interpreter. [2]

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3 Total: 6 marks

This question is about the stages of compilation.

(a) State the four stages of compilation in the correct order. [2]

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(b) Describe what happens during lexical analysis. [2]

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(c) Describe the purpose of code optimisation. [2]

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4

Total: 6 marks

This question is about linkers, loaders and libraries.

(a) Describe what a linker does. [2]

(b) Describe what a loader does. [2]

(c) Give one advantage to a programmer of using a library. [2]

5

Total: 4 marks

This question is about libraries.

(a) Explain what is meant by a library, giving one example of when one might be used. [3]

(b) State one disadvantage of using library files. [1]

A developer writes a program in a high-level language. It uses several routines from a graphics **library**, and must be distributed to customers as a ready-to-run program.

[9]

END OF QUESTIONS