

10 A programmer is developing a computer program.

- (a) Explain how the programmer can first use an interpreter **and** then a compiler to develop the computer program.

Interpreter

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Compiler

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[4]

- (b) The programmer releases the program as Free Software.

Describe what is meant by Free Software.

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[2]

- (c) A user downloads the computer program from the internet.

State what should be included as part of the download to make sure the program is authentic.

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[1]

- 7 (a) Asymmetric encryption is a type of cryptography.

Identify **one** other type of cryptography.

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- (b) An organisation holds two asymmetric encryption keys, which they intend to use to receive secure transmissions.

Explain how the organisation makes use of the two keys to receive a secure transmission.

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(c) The data that is transferred can also be verified using a checksum.

Explain how data can be verified using a checksum.

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9 Secure Socket Layer (SSL) and Transport Layer Security (TLS) are two protocols.

(a) State **two** functions of SSL/TLS.

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(b) Give **two** examples of situations where the use of SSL/TLS would be appropriate.

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