

1. Nov/2021/Paper_11/No.8

Victoria develops a computer game to sell on a gaming website. She writes her program using English-like statements.

(a) State which type of programming language Victoria is using.

..... [1]

(b) Victoria uses **two** different types of translator when creating the program for the computer game.

State which translator is the most suitable for the given tasks.

Give the benefits of using that translator for the task.

You must choose a different translator for each task.

(i) To translate the code during development of the game.

Translator

Benefits

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[3]

(ii) To translate the final program and upload to the website for distribution, without the source code.

Translator

Benefits

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[3]

2. Nov/2021/Paper_12/No.6

A programmer can use translators, such as an interpreter and a compiler, when developing a computer program.

(a) Give **one** similarity between a compiler and an interpreter.

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..... [1]

(b) Describe **two** differences between a compiler and an interpreter.

Difference 1

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Difference 2

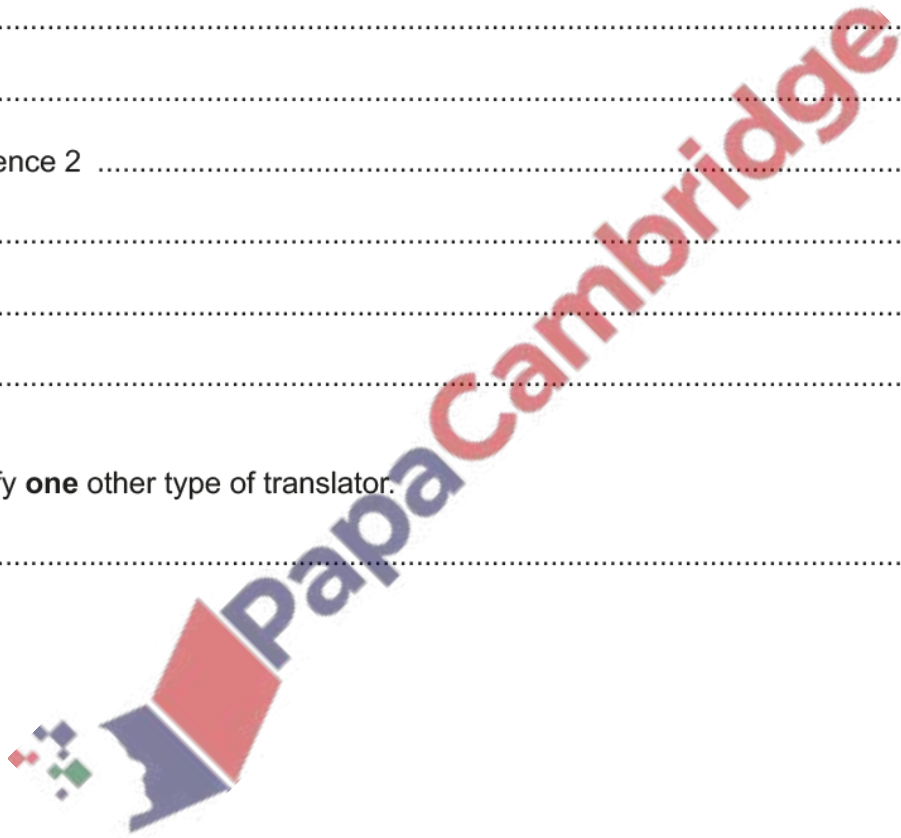
.....

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..... [4]

(c) Identify **one** other type of translator.

..... [1]



Julius creates a computer application that calculates how many years it will take to pay for a house.

- (a) Julius uploads his application to his website for people to download. Before he uploads the application, he translates the code using a compiler.

Explain why Julius uses a compiler, rather than an interpreter, to do this.

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..... [4]

- (b) Julius also creates videos to explain how to use the application that he has created. He reduces the file size of the videos using lossless compression.

- (i) Describe how lossless compression reduces the file size of the video.

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..... [3]

- (ii) State why Julius uses lossless compression, rather than lossy compression.

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..... [1]

(c) Julius wants to distribute his application to a wider audience. He is considering distributing it as freeware or free software.

(i) Describe freeware and free software.

Freeware

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Free software

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[4]

(ii) Julius also considers distributing a trial version of the application.

Identify the type of software he could use to distribute his application as a trial version.

..... [1]

(d) Julius makes sure that all data transmission to and from his website is secure.

One way a user can check if his website uses secure data transmission is to check its certificate.

Give **two** other ways that a user can identify if his website uses secure data transmission.

1

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2

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[2]

Six statements are given about programming languages.

Tick (✓) to show whether each statement applies to high-level language, assembly language or machine code. Some statements may apply to more than one type of programming language.

Statement	High-level language (✓)	Assembly language (✓)	Machine code (✓)
it requires a translator to be processed by a computer			
it is an example of low-level language			
it uses mnemonics			
it uses English-like statements			
it can be used to directly manipulate hardware in the computer			
it is portable			

[6]

