

“3-a-day” A-Level Exam Practice (011)

Question 1

1 See And Believe is a company that specialises in computer-generated imagery (CGI) for films.

Producing CGI requires lots of processing power and so the company has a large number of high-performance computers.

(a) Explain why See And Believe would use a distributed operating system.

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..... [3]

Question 2

2 (a) Different types of translator may be used by programmers.

(i) Explain the main purpose of a translator.

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..... [2]

Question 3

(ii) Give the names of **two** types of translator and explain the main difference between them.

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..... [4]

The questions on this worksheet have been taken from the OCR A-Level Computer Science Sample Paper

Answer 1

1	a	<p>Any 2 from:</p> <ul style="list-style-type: none"> • Allow multiple computers/resources... (AO1.1) • ...To be treated as one/work on the same problem (AO1.1) <p>1 from:</p> <ul style="list-style-type: none"> • Meaning all the computers can work on producing the same special effect. (AO2.1) 	3	<p>AO1.1 (2) AO2.1 (1)</p>
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Answer 2

2	(a)	(i)	<ul style="list-style-type: none"> • Convert from source code\high level code\low level code... • ...to object code\intermediate\executable\machine. 	2	
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Answer 3

		(ii)	<p>Two from (max 2): <i>Type:</i></p> <ul style="list-style-type: none"> • Compiler • Interpreter • Assembler. <p><i>Difference:</i> <i>(compiler & interpreter)</i></p> <ul style="list-style-type: none"> • Compiler translates whole program as a unit (to intermediate language) • Compiler gives list of errors at end of compilation • Interpreter reports errors as they are found • Interpreter translates & runs 1 statement at a time. <p><i>(compiler or interpreter, & assembler)</i></p> <ul style="list-style-type: none"> • Compiler/interpreter uses high-level source code • Assembler uses low-level source code. • Assembler gives list of errors at end. 	4	<p>Max 2 for types, max 2 for difference</p>
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