6-A-Day – Computer Science GCSE (47)

Q1	numberOfPages = numberOfPages+numberOfChapters	1	Accept: • += instead of = numberOfPages • numberOfPages=RoundDown(numberOfWords/wordsPerPage) +numberOfChapters • numberOfPages=RoundDown(numberOfWords/300) +numberOfChapters Variable names must be spelt correctly, ignore case
Q2	• Integer/Int • It is a whole number/you can't have half a word	2	Do not allow 'need to ignore the decimal' Cannot get reason if data type incorrect
Q3	• String (name) • Real/Single/Double/Currency/Float/(Decimal) (price)	2	
Q4	1 mark for identification, 1 for matching description e.g. • Error diagnostics/debugger • …highlight errors/suggest changes • Run-time environment • …Lets you run/test the program • Text editor • …highlight key words • …auto-indent • …to type/edit source code • …Auto-complete • …highlight syntax errors • Versioning tools • …To allow for tracing back • …To create new files with changes • Stepping/breakpoints • …Allow tracing of algorithms	4	Do not allow auto-documentation. Can get description mark, without identification/incorrect identification Allow: • Variable watch/window • See how the values change Do not allow compiler/interpreter
Q5	Max 2 for compiler, 2 for interpreter Compiler • To convert to low-level in one go • Create an executable//export the file • To distribute the software • Users will have no access to source code... • ...so no-one can edit/steal/copy the code/program • Use for error detection Interpreter • To convert to low-level line by line • To test the program // to find errors • stops running when it finds an error//shows the location of the error when found • it is quicker (compared to compiler) to re-interpret than re-compile	4	The uses must be different for compiler and interpreter
Q6	2 from • Fewer bits are needed per colour • which means fewer bits per pixel • Any example from diagram	2	"fewer bits" with no reason or application is 0