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| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | |  |  | | --- | --- | |  |  | | **7.** | Explain why parameter passing to a function can be a better alternative to using global variables.  It improves the readability of the code as they add confusion and complexity to the code. This Is because there can easily be conflicts with variable names from different parts of the code that is hard to spot. Where as with parameters it is a local scope so there is less chance of conflict.      **[2]** | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | |  |  | | --- | --- | |  |  | | **8.** | 1. A procedural programming language may use procedures.  Explain the term procedural programming language.   This is a language that can be broken into procedures and is run from top to bottom.      **[2]**   1. The same variable name may be used in more than one procedure in a program.  Explain how a variable named result may be used in different procedures without causing errors.   Each procedure has its own local scope meaning you can have two variables named the same and as long as there not in the same scope they will be different as they cant see/interact with eachother      **[2]**   1. Explain parameter passing.   This Is the process of passing data within a piece of code between sub processes and there respective scopes. This is a way of controlling the data flow within a program. For example you could have a function that takes 2 numbers and times them together however so another part of the program that is in a different scope can use this function we must pass the 2 numbers into it otherwise it wont have access to them.        **[5]** | | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | |  |  | | --- | --- | |  |  | | **9(a).** | Explain, using **one** example, why global variables are sometimes used in a program.  A global variable could sometimes be used for a variable that needs to be accessed and edited throughout the whole program and therefore in a vast number of different scopes. This could be a constant like PI = 3.142          **[3]** | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | |  |  | | --- | --- | |  |  | | **(b).** | Explain why good programming practice generally avoids the use of global variables.  Because it can cause a lot of confusion with overlapping name causing unnecessary and hard to spot bugs in the code          **[2]** | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | |  |  | | --- | --- | |  |  | | **(c).** | Describe **one** difference between a global and a local variable.  A global variable can be accessed anywhere in a program regardless of the scope whereas a local variable can only be accessed in its local scope    **[2]** | | |

**END OF QUESTION PAPER**