Name: Class:

Task 1

The editor in many IDEs will colour different parts of computer code with different colours. This is known as syntax highlighting.

Look at the below code written using OCR Reference Language.

age = input("Please enter your age")  
if age < 15 then  
 print("Sorry, you cannot watch this film")  
else  
 print("Please enter")  
endif

(a) Apply syntax highlighting to the program above as follows:

* Blue – keywords
* Purple – variable names
* Red – Strings
* Green – function or procedure names

(b) Explain how the syntax highlighting will change in the program.

(c) Explain how syntax highlighting can help a programmer to detect bugs in their program.

Task 2

For the language that you have been studying for GCSE, search for possible IDEs that you could use – for example “Python IDE comparison”.

In the table below, record **five** features that the IDE has to help programmers. For each feature, explain what it means.

|  |  |  |
| --- | --- | --- |
|  | **IDE 1** | **IDE 2:** |
| **IDE name** |  |  |
| **Feature 1** |  |  |
| **Feature 2** |  |  |
| **Feature 3** |  |  |
| **Feature 4** |  |  |
| **Feature 5** |  |  |

Task 3

(a) Open the IDE that you use to write programs in. Translate the code in Task 1 into the language and IDE that you are using.

(b) Test the program to see that it works correctly.

(c) Now see if your IDE does each of the following features.

* Syntax highlighting
* Line numbers
* Error diagnostics
* Breakpoints
* Stepping through code
* Variable watching

If you find any of these features in your IDE, screenshot examples of how it works below.