SUBAIR CALEB IBUKUN

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Good Day DR ABIOLA, How are you doing Ma? I hope you and your family are doing fine. Stay safe Ma and God bless you.

1. **TRANSLATORS**: A translator can be defined in many ways. A translator is a programming language processor that converts a computer program from one language to another. It takes a program written in source code and converts it into machine code.

A translator or programming language processor is also a generic term that can refer to anything that converts code from one computer language into another.

1. Make comparative analysis of the following translators:

a. .Assembler

b. Compiler

c. .Interpreter

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| Assembler | Compiler | Interpreter |
| Software that converts programs written in assembly language into machine language | Software that converts programs written in high-level language into machine language | Software that translates a high-level language program into machine language |
| Convert assembly language program to machine language | Convert the whole high-level language program to machine language at a time | Convert the high-level language program to machine language line by line |
| Used by assembly language | Used by C, C++ | Used by Ruby, Perl, python ,PHP |
| Debugging is difficult | Debugging is easy | Interpreter is good for fast debugging |

1. Why is there need for high level programming languages.

This is so because they are;

* Easy to Read
* Easy to Write
* Easy to Maintain
* Easy to debug
* They provide higher levels of abstraction