1 Translators are software code converting tools that convert high-level or assembly language into machine language so that it is understood by the CPU and can be therefore interpreted and executed by the system

2. **Differences between compiler, interpreter and assembler**

|  |  |  |
| --- | --- | --- |
| Compiler  | Interpreter  | Assembler |
| Software that converts programs written in a high level language into machine language  | Software that translates a high level language program into machine language  | Software that converts programs written in assembly language into machine language  |
| Converts the whole high level language program into machine language  | Converts the high level language program into machine language line by line | Converts assembly language program to machine language  |
| Needed every time you run the program  | Only needed to create an excitable file | Needed all the time |
| Returns a list of errors found and on which lines they are found | Will only inform you of the first error it find in the program  | Runs quickly as conversation between two low level languages is just reliant on the processors instruction set |
| Used by C, C++ | Used by Ruby, Perl, Python, PHP | Used by assembly language  |

3. It is needed because it allows the ease of use for programmers when writing codes due to the difficulty in understanding and complexity of low level languages