What is compiler ?

Source: <https://techdifferences.com/difference-between-compiler-and-interpreter.html>

* A compiler is a translator which transforms source language (high-level language) into object language (machine language). In contrast with a compiler, an interpreter is a program which imitates the execution of programs written in a source language. Another difference between Compiler and interpreter is that Compiler converts the whole program in one go on the other hand Interpreter converts the program by taking a single line at a time
* Compiler and interpreter are the types of language translator.

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| Basis for comparison | Compiler | Interpreter |
| Input | It takes an entire program at a time. | It takes a single line of code or instruction at a time. |
| Output | It generates intermediate object code. | It does not produce any intermediate object code. |
| Working mechanism | The compilation is done before execution. | Compilation and execution take place simultaneously. |
| Speed | Comparatively faster | Slower |
| Memory | Memory requirement is more due to the creation of object code. | It requires less memory as it does not create intermediate object code. |
| Errors | Display all errors after compilation, all at the same time. | Displays error of each line one by one. |
| Error detection | Difficult | Easier comparatively |
| Pertaining Programming languages | C, C++, C#, Scala, typescript uses compiler. | PHP, Perl, Python, Ruby uses an interpreter. |