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| INTERPRETER | COMPILER |
| * Interpreter translates just one statement of the program at a time into machine code. | * Compiler scans the entire program and translates the whole of it into machine code at once. |
| * An interpreter takes very less time to analyze the source code. However the overall time to execute the process is much slower. | * A compiler takes a lot of time to analyze the source code. However the overall time taken to execute the process is much faster. |
| * An interpreter does not generate an intermediary code. Hence an interpreter is highly efficient in terms of its memory. | * A compiler always generates an intermediary object code. It will need further linking. Hence more memory is needed. |
| * Keeps translating the program continuously till the first error is confronted. If any error is spotted it stops working and hence debugging becomes easy | * A compiler generates the error messages only after it scans the complete programs and hence debugging is relatively harder while working with a compiler. |