

## ASSIGNMENT - 1

### 1. Difference between compiler and interpreter:

Interpreter	Compiler
<p>Interpreter translates just one statement of the program at a time into machine code.</p>	<p>Compiler scans the entire program and translates the whole of it into machine code at once.</p>
<p>An interpreter takes very less time to analyze the source code. However, the overall time to execute the process is much slower.</p>	<p>A compiler takes a lot of time to analyze the source code. However, the overall time taken to execute the process is much faster.</p>
<p>It does not generate an intermediary code. Hence, an interpreter is highly efficient in terms of its memory.</p>	<p>A compiler always generates an intermediary code. It will need further linking. Hence, more memory is needed.</p>
<p>Keeps translating the program continuously till the first error is confronted. If any error is spotted, it stops working and hence debugging becomes easy.</p>	<p>A compiler generates the error message only after it scans the complete program and hence debugging is relatively harder while working with a compiler.</p>
<p>It is used by programming languages like Ruby and Python for example.</p>	<p>It is used by programming languages like C and C++ for example.</p>