

Day 1: Assignment 1

❖ Difference between Interpreter and Compiler:

Interpreter	Compiler
<ul style="list-style-type: none">• Translates program one statement at a time	<ul style="list-style-type: none">• Scans the entire program and translates it as a whole into machine code.
<ul style="list-style-type: none">• Interpreters usually take less amount of time to analyze the source code. However, the overall execution time is comparatively slower than compilers.	<ul style="list-style-type: none">• Compilers usually take a large amount of time to analyze the source code. However, the overall execution time is comparatively faster than interpreters.
<ul style="list-style-type: none">• No Object Code is generated, hence they are memory efficient.	<ul style="list-style-type: none">• Generates Object Code which further requires linking, hence they require more memory.
<ul style="list-style-type: none">• Example: Programming languages like JavaScript, Python, Ruby use interpreters.	<ul style="list-style-type: none">• Example: Programming languages like C, C++, Java use compilers.