

## HOMEWORK 4: Macros

1. Create a console-based application for sorting decimal numbers using quick sort and then convert the number to binary. You should utilize Object/Function like macros.
2. Create a simple calculator application that is capable to add and multiply up to four operators using only variadic macros. Use unique identifiers for each operation to invoke the correct macro function.
3. List and describe at least five possible ways to utilize macros in C++. Explain if other languages (such as Java) use macros and what is the main benefit of the utilization of macros.