

# Week5 Lab1 Report

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**What command you use to build your program? build the library?**

```
1 $ make all
```

In the Makefile, it will build the executable and the static library and the shared library. So after we make, we will have: `libmerge_sort.a`, and `libmerge_sort.so`, which are the static and shared libraries respectively.

**What command you use to run the executable? environment variables?**

```
1 $ ./merge_sort_static  
2 $ LD_LIBRARY_PATH=. ./merge_sort_shared.elf
```

The first command runs the executable built from the static library. The second command sets the `LD_LIBRARY_PATH` environment variable to the current directory, which allows the dynamic linker to find the shared library when running the executable built from the shared library.