# Solution for DLL

Following Solution given in worksheet the library and .dll files are generated.

These files are placed in the folder /adder_dynamic

In order to compile the program:

(1) – Do the standard command to obtain calc.obj, however now need the /DEXPORTING flag.

>> cl calc.cpp /c /EHsc /DEXPORTING

```
C:\Users\dndew\Documents\Projects\2023_Yr2Computing\Worksheet 3>cl calc.cpp /c /DEXPORTING /EHsc
Microsoft (R) C/C++ Optimizing Compiler Version 19.34.31937 for x64
Copyright (C) Microsoft Corporation.  All rights reserved.

calc.cpp
```

The /DEXPORTING flag indicates that some functions are exported and used by other programs. Our DLL for example.

(2) Next need to 'link' the program and library together.

```
C:\Users\dndew\Documents\Projects\2023_Yr2Computing\Worksheet 3>link calc.obj libadder.lib /out:calc_dynamic.exe /libpath:adder_dynamic
Microsoft (R) Incremental Linker Version 14.34.31937.0
Copyright (C) Microsoft Corporation.  All rights reserved.
```

(3) Important → If you now run calc_dynamic.exe an error will appear saying it cannot find the DLL.
You need to include the location of the DLL to path so that program can find it during runtime.

for example:

```
C:\Users\dndew\Documents\Projects\2023_Yr2Computing\Worksheet 3>set PATH=%PATH%;C:\Users\dndew\Documents\Projects\2023_Yr2Computing\Worksheet 3\adder_dynamic
```