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## 1. G++

```
* Executing task: C:\msys64\mingw64\bin\g++.exe -g2 -O3 -DNDEBUG -shared D:\CryptoLibrary\AES.cpp -o D:\CryptoLibrary\AES.dll -D_WIN32_WINNT=0x0A00 -pthread -LD:\CryptoLibrary\libs\cryptopp\gcc -l:libcryptopp.a -ID:\CryptoLibrary\include -Wall
* Terminal will be reused by tasks, press any key to close it.
```

|         |                    |                       |           |
|---------|--------------------|-----------------------|-----------|
| include | 11/03/2025 4:41 CH | File folder           |           |
| libs    | 11/03/2025 4:41 CH | File folder           |           |
| AES.cpp | 08/04/2025 2:14 CH | C++ Source File       | 4 KB      |
| AES.dll | 08/04/2025 2:16 CH | Application extens... | 28.653 KB |

```
D:\CryptoLibrary>ldd AES.dll
terminate called after throwing an instance of 'int'
terminate called recursively
ntdll.dll => /c/WINDOWS/SYSTEM32/ntdll.dll (0x7ffedf0c0600)
KERNEL32.DLL => /c/WINDOWS/System32/KERNEL32.DLL (0x7ffedd950000)
KERNELBASE.dll => /c/WINDOWS/System32/KERNELBASE.dll (0x7ffedca80000)
msvcrt.dll => /c/WINDOWS/System32/msvcrt.dll (0x7ffeddb30000)
ADVAPI32.dll => /c/WINDOWS/System32/ADVAPI32.dll (0x7ffeddd40000)
sechost.dll => /c/WINDOWS/System32/sechost.dll (0x7ffede270000)
RPCRT4.dll => /c/WINDOWS/System32/RPCRT4.dll (0x7ffedd820000)
libgcc_s_seh-1.dll => /mingw64/bin/libgcc_s_seh-1.dll (0x7ffebf130000)
libwinpthread-1.dll => /mingw64/bin/libwinpthread-1.dll (0x7ffeab6f0000)
libstdc++-6.dll => /mingw64/bin/libstdc++-6.dll (0x7ffdfc0000)
CRYPTBASE.DLL => /c/WINDOWS/SYSTEM32/CRYPTBASE.DLL (0x7ffedb9d0000)
bcryptPrimitives.dll => /c/WINDOWS/System32/bcryptPrimitives.dll (0x7ffedc790000)
D:\CryptoLibrary>
```

File Type: DLL

Section contains the following exports for AES.so

00000000 characteristics  
67F4D299 time date stamp Tue Apr 8 14:39:05 2025  
0.00 version  
1 ordinal base  
5 number of functions  
5 number of names

| ordinal | hint | RVA      | name             |
|---------|------|----------|------------------|
| 1       | 0    | 00001764 | AESDecrypt       |
| 2       | 1    | 000013AE | AESEncrypt       |
| 3       | 2    | 00001310 | GenerateAESKeyIV |
| 4       | 3    | 00001A0B | LoadKeyFromFile  |
| 5       | 4    | 00001B64 | SaveKeyToFile    |

Summary

3000 .bss  
3000 .data  
3A000 .debug\_abbrev  
17000 .debug\_aranges  
54000 .debug\_frame  
E9C000 .debug\_info  
220000 .debug\_line  
11000 .debug\_line\_str  
3B5000 .debug\_loclists

## 1. Clang

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

Executing task: C:\msys64\mingw64\bin\clang++.exe -shared -fPIC -o D:\Cryptolibrary\AES\_clang.so D:\Cryptolibrary\AES\_clang.cpp -D\_WIN32\_WINNT=0x0A00 -lpthread -LD:\cryptolibrary\libs\cryptopp\clang -l:libcryptopp.a -ID:\cryptolibrary\include -Wall

Terminal will be reused by tasks, press any key to close it.

AES\_clang.so

08/04/2025 2:42 CH

SO File

7.118 KB

```

D:\CryptoLibrary>ldd AES_clang.so
terminate called after throwing an instance of 'int'
terminate called recursively
ntdll.dll => /c/WINDOWS/SYSTEM32/ntdll.dll (0x7ffedf0c0000)
KERNEL32.DLL => /c/WINDOWS/System32/KERNEL32.DLL (0x7ffedd950000)
KERNELBASE.dll => /c/WINDOWS/System32/KERNELBASE.dll (0x7ffedca80000)
msvcrt.dll => /c/WINDOWS/System32/msvcrt.dll (0x7ffeddb30000)
ADVAPI32.dll => /c/WINDOWS/System32/ADVAPI32.dll (0x7ffeddd40000)
sechost.dll => /c/WINDOWS/System32/sechost.dll (0x7ffede270000)
RPCRT4.dll => /c/WINDOWS/System32/RPCRT4.dll (0x7ffedd820000)
libwinpthread-1.dll => /mingw64/bin/libwinpthread-1.dll (0x7ffeb6560000)
libgcc_s_seh-1.dll => /mingw64/bin/libgcc_s_seh-1.dll (0x7ffeb6530000)
libstdc++-6.dll => /mingw64/bin/libstdc++-6.dll (0x7ffdfcee0000)
CRYPTBASE.DLL => /c/WINDOWS/SYSTEM32/CRYPTBASE.DLL (0x7ffedb9d0000)
bcryptPrimitives.dll => /c/WINDOWS/System32/bcryptPrimitives.dll (0x7ffedc790000)

```

Dump of file AES\_clang.so

File Type: DLL

Section contains the following exports for AES\_clang.so

```

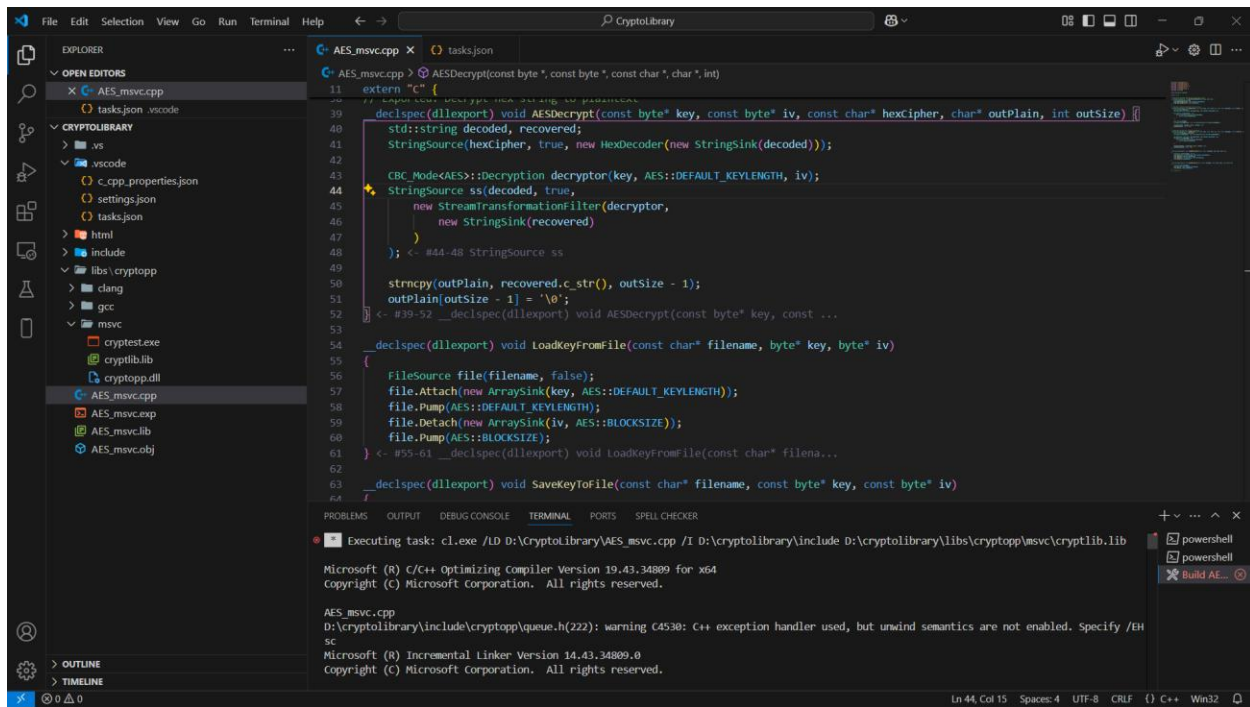
00000000 characteristics
67F4D47C time date stamp Tue Apr 8 14:47:08 2025
0.00 version
1 ordinal base
5 number of functions
5 number of names





```

| ordinal | hint | RVA      | name             |
|---------|------|----------|------------------|
| 1       | 0    | 00001850 | AESDecrypt       |
| 2       | 1    | 000013B0 | AESEncrypt       |
| 3       | 2    | 00001310 | GenerateAESKeyIV |
| 4       | 3    | 00001B30 | LoadKeyFromFile  |
| 5       | 4    | 00001C90 | SaveKeyToFile    |

Summary

2. Mvsc



|  |                    |                      |        |
|--|--------------------|----------------------|--------|
|  AES_msvc.cpp   | 08/04/2025 2:46 CH | C++ Source File      | 3 KB   |
|  AES_msvc.exp  | 08/04/2025 2:49 CH | Exports Library File | 2 KB   |
|  AES_msvc.lib | 08/04/2025 2:49 CH | Object File Library  | 3 KB   |
|  AES_msvc.obj | 08/04/2025 2:49 CH | 3D Object            | 496 KB |

File Type: LIBRARY

### Exports

| ordinal | name             |
|---------|------------------|
|         | AESDecrypt       |
|         | AESEncrypt       |
|         | GenerateAESKeyIV |
|         | LoadKeyFromFile  |
|         | SaveKeyToFile    |

### Summary

|    |            |
|----|------------|
| C6 | .debug\$.S |
| 14 | .idata\$2  |
| 14 | .idata\$3  |
| 8  | .idata\$4  |
| 8  | .idata\$5  |
| E  | .idata\$6  |

D:\Cryptolibrary>