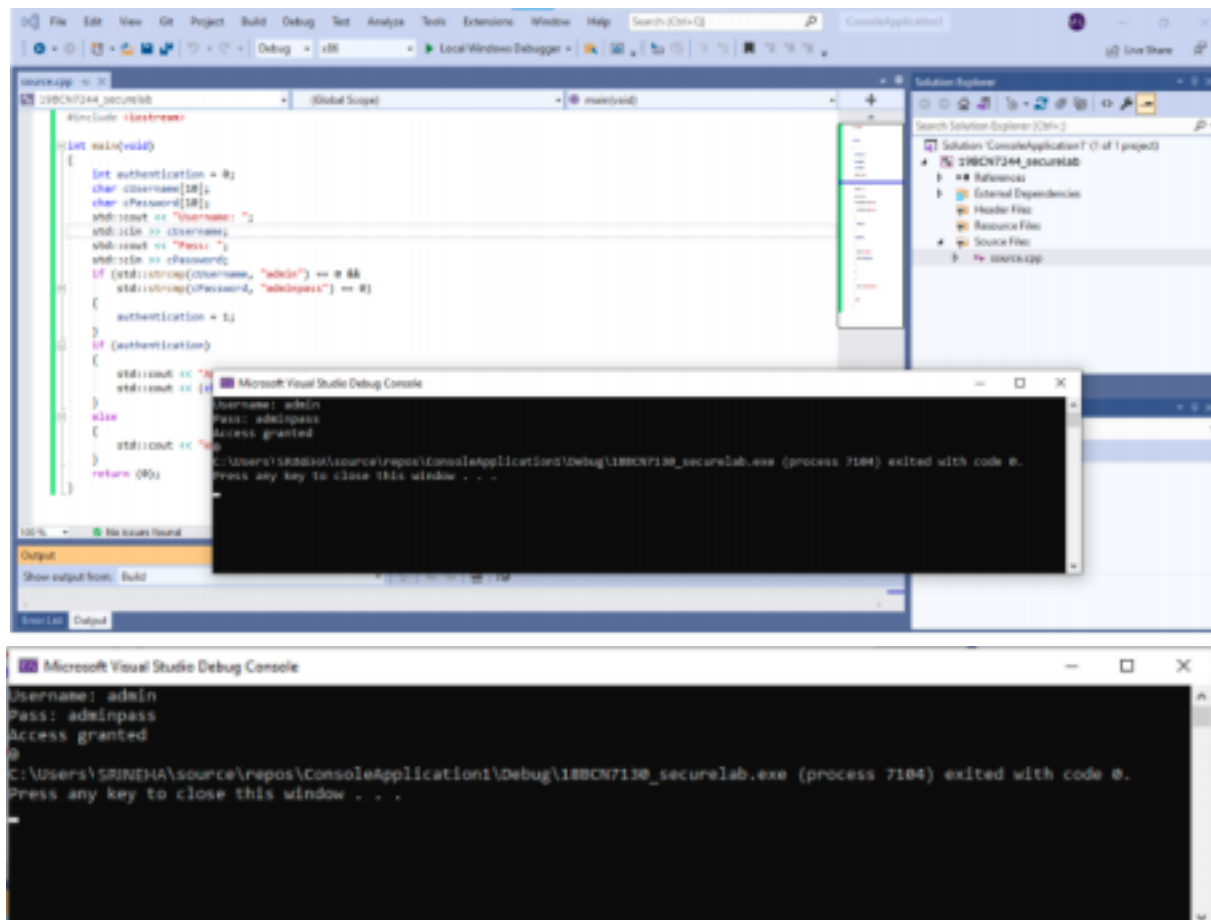S.V.SAIVAMSI,19BCN7258

Lab experiment – Creating secure and safe executable 1)

C++ Code & building the Executable

```cpp
#include <iostream>
int main(void)
{
int authentication = 0;
char cUsername[10];
char cPassword[10];
std::cout << "Username: ";
std::cin >> cUsername;
std::cout << "Pass: ";
std::cin >> cPassword;
if (std::strcmp(cUsername, "admin") == 0 &&
std::strcmp(cPassword, "adminpass") == 0)
{
authentication = 1;
}
if (authentication)
{
}
else
{
}
std::cout << "Access granted\n";
std::cout << (char)authentication;
std::cout << "Wrong username and password\n";
return (0);
}
```
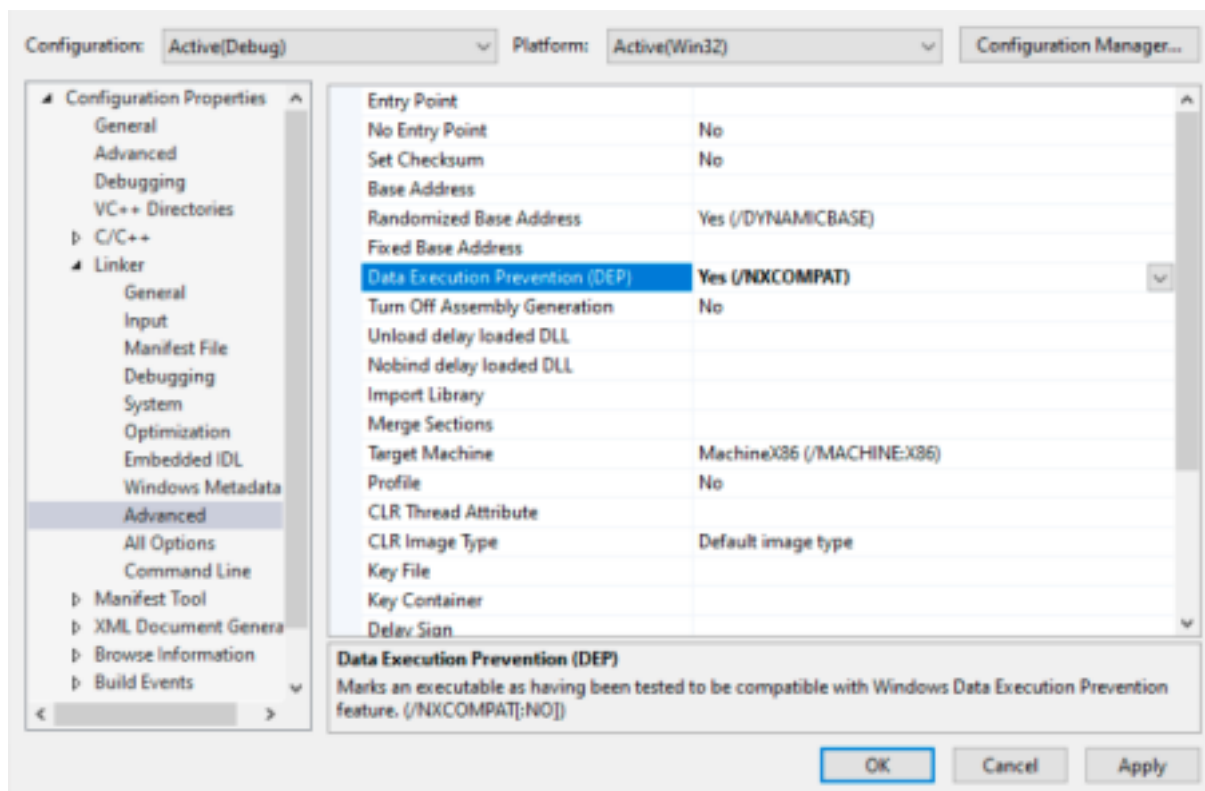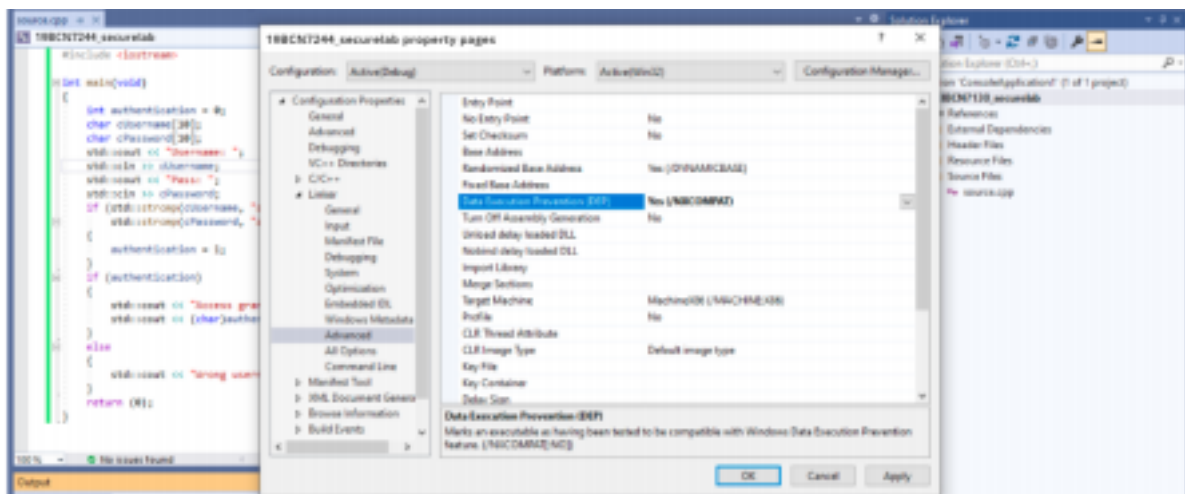
2) Verifying the DEP & ASLR status in Process Explorer

You can see DEP disabled & No ASLR.

3) Rebuilding the same executable After enabling DEP & ASLR

As you can see, I have enabled DEP, ASLR, SEH above.
I have Rebuilded my project and run the same and we can verify the status of DEP, ASLR, SEH.

4) Verifying the DEP & ASLR status in Process Explorer After Enabling