

# Challenges : Basic 07

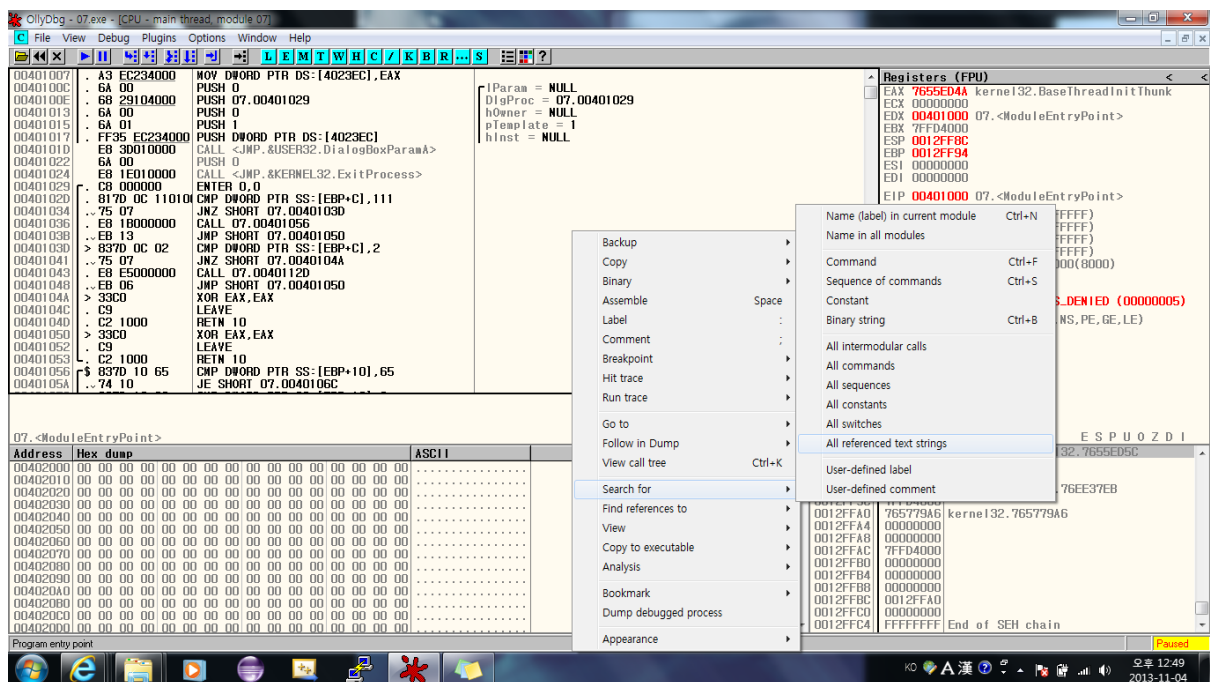
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## Korea :

컴퓨터 C 드라이브의 이름이 CodeEngn 일경우 시리얼이 생성될때 CodeEngn은 "어떤것"으로 변경되는가

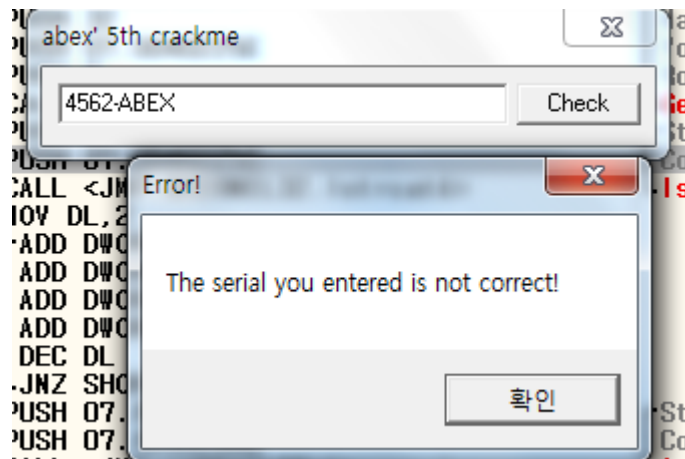
그럼 일단 07.exe 파일을 디버깅 해보자

올리디버거로 들어가서 search for -> all referenced text strings



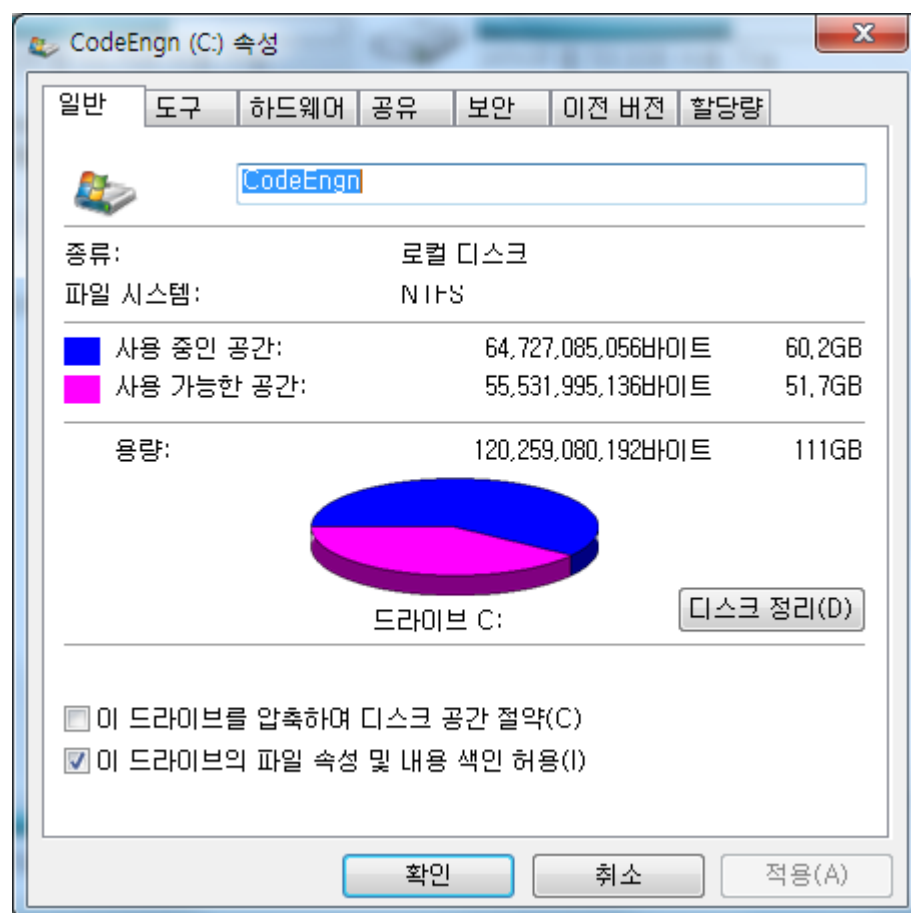
00401000	PUSH 0	(Initial CPU selection)
0040109E	PUSH 07.004023F3	ASCII "4562-ABEX"
004010CF	PUSH 07.004023FD	ASCII "L2C-5781"
00401103	PUSH 07.00402434	ASCII "Error!"
00401108	PUSH 07.0040243B	ASCII "The serial you entered is not correct!"
00401119	PUSH 07.00402406	ASCII "Well Done!"
0040111E	PUSH 07.00402411	ASCII "Yep, you entered a correct serial!"

저 둘 중 하나가 시리얼번호 아니면 두개를 조합해서 한번 입력해보자

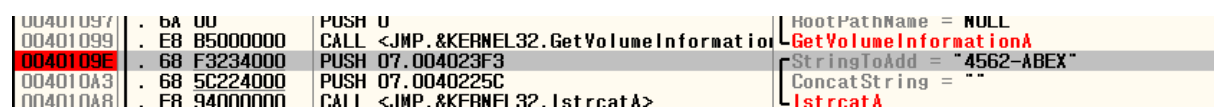


역시,,,에러다

그러면 문제대로 C드라이버의 이름을 CodeEngn 으로 바꾸고 다시 실행시켜보자



다시 실행~



여기에 브레이크 포인트를 걸고 실행시켜보자



체크를 누르면 브레이크 포인트 걸었던 곳부터 f8 로 한 단계씩 들어가보자

00401097	. 6A 00	PUSH 0	RootPathName = NULL
00401099	. E8 B5000000	CALL <JMP.&KERNEL32.GetVolumeInformationA>	GetVolumeInformationA
0040109E	. 68 F3234000	PUSH 07.004023F3	StringToAdd = "4562-ABEX"
004010A3	. 68 5C224000	PUSH 07.0040225C	ConcatString = "CodeEngn"
004010A8	. E8 94000000	CALL <JMP.&KERNEL32.lstrcatA>	lstrcatA
004010AD	. B2 02	MOV DL,2	
004010AF	> 8305 5C224000	ADD DWORD PTR DS:[40225C],1	
004010B6	. 8305 5D224000	ADD DWORD PTR DS:[40225D],1	
004010BD	. 8305 5E224000	ADD DWORD PTR DS:[40225E],1	
004010C4	. 8305 5F224000	ADD DWORD PTR DS:[40225F],1	
004010CB	. FECA	DEC DL	
004010CD	. ^75 F0	JNZ SHORT 07.004010AF	

그럼 ConcatString 에 CodeEngn 이라고 들어가있다.

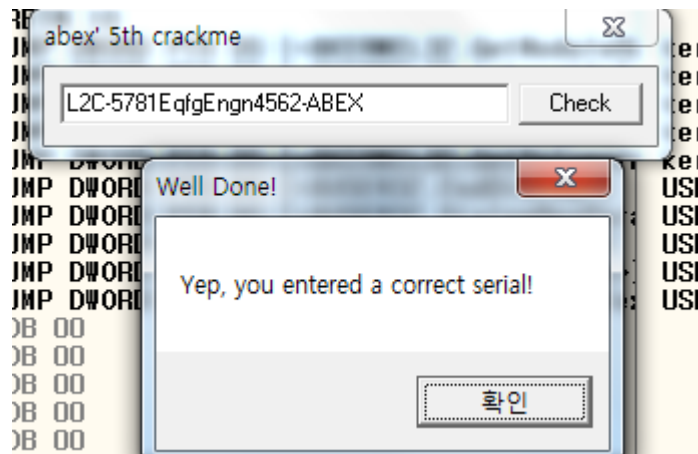
00401097	. 6A 00	PUSH 0	RootPathName = NULL
00401099	. E8 B5000000	CALL <JMP.&KERNEL32.GetVolumeInformationA>	GetVolumeInformationA
0040109E	. 68 F3234000	PUSH 07.004023F3	StringToAdd = "4562-ABEX"
004010A3	. 68 5C224000	PUSH 07.0040225C	ConcatString = "EqfgEngn4562-ABEX"
004010A8	. E8 94000000	CALL <JMP.&KERNEL32.lstrcatA>	lstrcatA
004010AD	. B2 02	MOV DL,2	
004010AF	> 8305 5C224000	ADD DWORD PTR DS:[40225C],1	
004010B6	. 8305 5D224000	ADD DWORD PTR DS:[40225D],1	
004010BD	. 8305 5E224000	ADD DWORD PTR DS:[40225E],1	
004010C4	. 8305 5F224000	ADD DWORD PTR DS:[40225F],1	
004010CB	. FECA	DEC DL	
004010CD	. ^75 E0	JNZ SHORT 07.004010AF	
004010CF	. 68 FD234000	PUSH 07.004023FD	StringToAdd = "L2C-5781"
004010D4	. 68 00204000	PUSH 07.00402000	ConcatString = ""
004010D9	. E8 63000000	CALL <JMP.&KERNEL32.lstrcatA>	lstrcatA

계속 진행시키다보면 004010AF~004010CD 까지 두바퀴 돌고 ConcatString 은 EqfgEngn4562-ABEX 로 바뀐다

004010CB	. FECA	DEC DL	
004010CD	. ^75 E0	JNZ SHORT 07.004010AF	
004010CF	. 68 FD234000	PUSH 07.004023FD	StringToAdd = "L2C-5781"
004010D4	. 68 00204000	PUSH 07.00402000	ConcatString = "L2C-5781EqfgEngn4562-ABEX"
004010D9	. E8 63000000	CALL <JMP.&KERNEL32.lstrcatA>	lstrcatA
004010DE	. 68 5C224000	PUSH 07.0040225C	StringToAdd = "EqfgEngn4562-ABEX"
004010E3	. 68 00204000	PUSH 07.00402000	ConcatString = "L2C-5781EqfgEngn4562-ABEX"
004010E8	. E8 54000000	CALL <JMP.&KERNEL32.lstrcatA>	lstrcatA
004010ED	. 68 24234000	PUSH 07.00402324	String2 = "Enter your serial"
004010F2	. 68 00204000	PUSH 07.00402000	String1 = "L2C-5781EqfgEngn4562-ABEX"
004010F7	. F8 51000000	CALL <JMP.&KERNEL32.lstrcatA>	lstrcatA

그리고 이것이 최종 시리얼 번호이다.

그러므로 CodeEngn 은 EqfgEngn 으로 바뀐다.



성공~!