

Disassembly of program

Store "Hello\n" on the stack

1st storage -> "Hell" (dword since it is 4 bytes)

2nd storage -> "o\n" (word since it is 2 bytes)

3rd storage -> null terminator (1 byte 0x0)

```
0x4005d0 <main+9>      mov     DWORD PTR [rbp-0x1b], 0x6c6c6548
0x4005d7 <main+16>     mov     WORD PTR [rbp-0x17], 0xa6f
0x4005dd <main+22>     mov     BYTE PTR [rbp-0x15], 0x0
```

```
0x00007fffffffef400 | +0x0000: 0x6c65480000400640 ← $rsp
0x00007fffffffef408 | +0x0008: 0x000000000000a6f6c ("lo"?)
```

```
0x4005f7 <main+48>     mov     DWORD PTR [rbp-0x14], 0x0
0x4005fe <main+55>     jmp     0x400618 <main+81>
```

1st instruction -> store argument "Hello\n" in rax register

2nd instruction -> prepare for function call as rdi is populated with "Hello\n"

3rd instruction -> calls strlen()

```
0x40061e <main+87>     lea     rax, [rbp-0x1b]
0x400622 <main+91>     mov     rdi, rax
→ 0x400625 <main+94>     call    0x4004b0 <strlen@plt>
```