



**Department of Electrical Engineering and Computing
Computing Security**

CSEC 202 Reverse Engineering Fundamentals

Spring 2024

Sections: 600, 601, and 602

Extra Credit #1:

Get your assembly skillz up to speed!

Release Date: February 16, 2024

Due Date: February 25, 2024 – 11:59:59 p.m. (GST= GMT+4)

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Extra Credit #1 :

Get your assembly skillz up to speed!

Instructions:

- (1) Compile the hello world C code into assembly code

Code:

```
#include <stdio.h>

int main(int argc, char* argv[]) {
    if (argc == 2)
        printf("Hello %s\n", argv[1]);
    return 0;
}
```

GCC Command:

```
gcc -W -Wall -Wextra -Wpedantic -fno-asynchronous-unwind-tables -O0 -S -masm=intel hello.c -o hello.s
```

- (2) For each line with an assembly instruction, add a comment explaining what that instruction is doing
- (3) Be smart about it! No “moves 2 into eax” Instead say: “the number of args must be 2”
- (4) Note that your assembly output may vary based on the gcc version you're using, and that's completely acceptable.

Grade: 5 additional bonus points (compensates for points lost on actual homework assignments)

Teams:

This assignment can be done individually or in a team of 2. **Only one team member** needs to submit on behalf of everyone in their group

Submission:

Upload your commented assembly code file (called hello.s) to this Assignment.