

gcc compiler

- One of the stricter C compilers
- Visual Studio/Code Blocks/CLion do **NOT** use gcc by default
- You can switch your IDE's compiler to gcc
 - See setup guide!
- **Tip:** Write your code in the IDE of your choice, then test the final version on Eustis. If your IDE uses gcc, the result will be the same as Eustis *MOST* of the time

Clang compiler

```
main.c
1
2 #include <stdio.h>
3 int addJ(int n)
4 {
5     int j;
6     for(int i=0; i<n; i++)
7     {
8         j++;
9     }
10    return j;
11 }
12
13 int main()
14 {
15     printf("%d\n", addJ(12));
16 }
17
18
```

```
https://NotedVibrantRuntimeLibrary.tiffanydo.repl.run
❯ clang-7 -pthread -lm -o main main.c
❯ ./main
12
❯
```

We did not assign `int j = 0`, but this is fine with that and automatically assigns `j` to 0 for us.

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```
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5      int j;
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```

<https://NotedVibrantRuntimeLibrary.tiffanydo.repl.run>

```
clang version 7.0.0-3~ubuntu0.18.04.1 (tags/RELEASE_700/final)
gcc main.c
> ./a.out
-345610932
>
```

We did not assign `int j = 0`, but this is not fine in gcc. Same language (C), but different compilers!