Copilot

Sure, let's break this down into a few steps. We'll create two files: a header file (`add.h`) that contains the function prototype, and a C file (`main.c`) that includes the header file and contains the `main` function and the function definition.

Here's what the `add.h` file looks like:

```
// add.h
#ifndef ADD_H  // Include guard to prevent double inclusion of header file
#define ADD_H

int add(int a, int b);  // Function prototype

#endif  // ADD_H
```

And here's the `main.c` file:

```
// main.c
#include <stdio.h>
#include "add.h"  // Include the header file

int main() {
    int sum = add(5, 10);  // Function call
    printf("Sum = %d\n", sum);
    return 0;
}

int add(int a, int b) {  // Function definition
    return a + b;
}
```

To compile and generate an executable, you can use the `gcc` compiler. Here are the steps:

1. Open a terminal in the directory containing your `main.c` and `add.h` files.
2. Compile the `main.c` file with the following command: `gcc -o main main.c`
3. Run the resulting executable with the command: `./main`

The output should be `Sum = 15`, which is the result of adding 5 and 10.

Please note that these instructions are for a Unix-like operating system such as Linux or MacOS. If you're using Windows, you might need to use a different command to run the executable, depending on your setup. Also, make sure you have the `gcc` compiler installed on your system. If not, you can download it from the GCC official website.