

Working with multiple files in c

Step 1

```
#include <stdio.h>

int Sum(int a, int b)
{
    return a+b;
}

int main(void)
{
    int a, b;
    printf("Insert your numbers\n");
    scanf("%d %d",&a,&b);
    printf("%d+%d=%d\n",a,b,Sum(a,b));
    return 0;
}
```

Step 2: Just prototype the function and link the files together

main.c

```
#include <stdio.h>
int Sum(int, int);

int main(void)
{
    int a, b;
    printf("Insert your numbers\n");
    scanf("%d %d",&a,&b);
    printf("%d+%d=%d\n",a,b,Sum(a,b));
    return 0;
}
```

Function.c

```
int Sum(int a, int b)
{
    return a+b;
}
```

run `gcc main.c Function.c`

Step 3.

```
#include <stdio.h>
#include "Function.c"

int main(void)
{
    int a, b;
    printf("Insert your numbers\n");
    scanf("%d %d",&a,&b);
    printf("%d+%d=%d\n",a,b,Sum(a,b));
    return 0;
}
```

run `gcc main.c`

Step 4

main.c

```
#include <stdio.h>
#include "Function.h"

int main(void)
{
    int a, b;
    printf("Insert your numbers\n");
    scanf("%d %d",&a,&b);
    printf("%d+%d=%d\n",a,b,Sum(a,b));
    return 0;
}
```

Function.c

```
#include "Function.h"
int Sum(int a, int b)
{
    return a+b;
}
```

and

Function.h

```
#ifndef FUNCTIONS_H_INCLUDED
#define FUNCTIONS_H_INCLUDED
/* ^^ these are the include guards */

/* Prototypes for the functions */
/* Sums two ints */
int Sum(int a, int b);

#endif
```

run `gcc main.c Function.c`

Mon, Oct 18, 2021 12:34