

# WEEKLY INTERNSHIP ASSIGNMENT 3

## Problem Description

Divide a large program into separate functions and files to demonstrate modular design.

## Project Structure

ModularProject/

- main.c
- math\_operations.h
- math\_operations.c

```
----- Main Program ( main.c ) -----
</> #include <stdio.h>
</> #include "math_operations.h"

int main() {
    int x = 10, y = 5;

    printf("Addition: %d\n", add(x, y));
    printf("Subtraction: %d\n", subtract(x, y));

    return 0;
}
```

```
----- Header File ( math_operations.h ) -----
</> #ifndef MATH_OPERATIONS_H
</> #define MATH_OPERATIONS_H

// Function declarations
int add(int a, int b);
int subtract(int a, int b);

#endif
```

```
----- Source File ( math_operations.c ) -----
</> #ifndef MATH_OPERATIONS_H
</> #define MATH_OPERATIONS_H

// Function declarations
int add(int a, int b);
int subtract(int a, int b);

#endif
```

```
----- Compilation Command -----
</> gcc main.c math_operations.c -o
modular_program
```

```
----- Execution Output -----
</> Addition: 15
Subtraction: 5
```

