

Module: R1: C Programming
Section: Build Systems Task: Make or Break

Task 4.1

Make or Break

1. Code Snippets:

a. header.h:

```
#ifndef HEADER_H
#define HEADER_H

#include<stdio.h>

//Function Prototype

int add(int *x, int *y);

#endif
```

b. main.c:

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

int main(){
    int x,y;
    int sum = 0;

    printf("Enter the value of x: \n");
    scanf("%d", &x);

    printf("Enter the value of y: \n");
    scanf("%d", &y);

    sum = add (&x, &y);

    printf("Sum is = %d\n", sum);

    return 0;
}
```

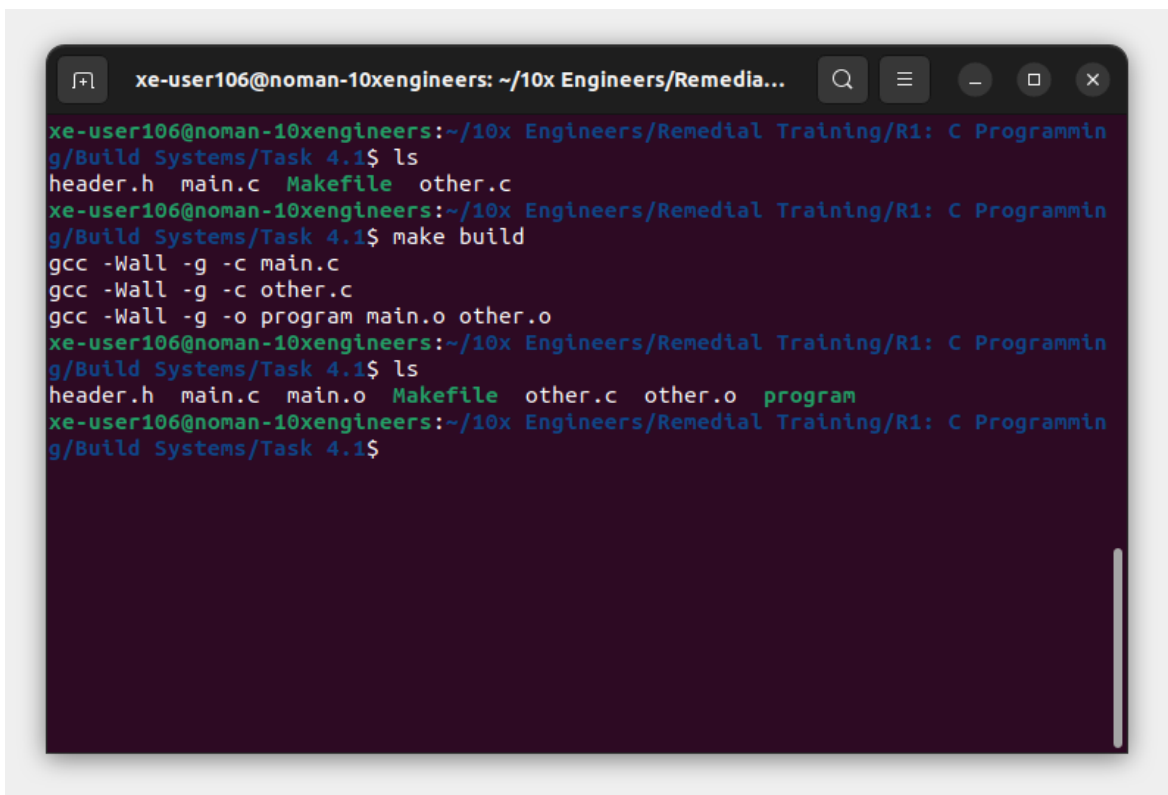
c. other.c:

```
#include "header.h"

int add(int *x, int *y){
    int sum=0;
    sum = *x + *y;
    return sum;
}
```

2. Key Visualization:

```
make build
```

A terminal window with a dark background and light-colored text. The window title is "xe-user106@noman-10xengineers: ~/10x Engineers/Remedia...". The terminal shows the following commands and output:

```
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programmin
g/Build Systems/Task 4.1$ ls
header.h main.c Makefile other.c
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programmin
g/Build Systems/Task 4.1$ make build
gcc -Wall -g -c main.c
gcc -Wall -g -c other.c
gcc -Wall -g -o program main.o other.o
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programmin
g/Build Systems/Task 4.1$ ls
header.h main.c main.o Makefile other.c other.o program
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programmin
g/Build Systems/Task 4.1$
```

3. Output:

```
xe-user106@noman-10xengineers: ~/10x Engineers/Remedial Training/R1: C Programming/Build Systems/Task 4.1$ ls
header.h  main.c  main.o  Makefile  other.c  other.o  program
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programming/Build Systems/Task 4.1$ make run
./program
Enter the value of x:
12
Enter the value of y:
14
Sum is = 26
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programming/Build Systems/Task 4.1$ make run
./program
Enter the value of x:
98
Enter the value of y:
1453
Sum is = 1551
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programming/Build Systems/Task 4.1$ make run
./program
Enter the value of x:
-3
Enter the value of y:
12
Sum is = 9
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programming/Build Systems/Task 4.1$ make run
./program
Enter the value of x:
-4000
Enter the value of y:
654
Sum is = -3346
xe-user106@noman-10xengineers:~/10x Engineers/Remedial Training/R1: C Programming/Build Systems/Task 4.1$
```