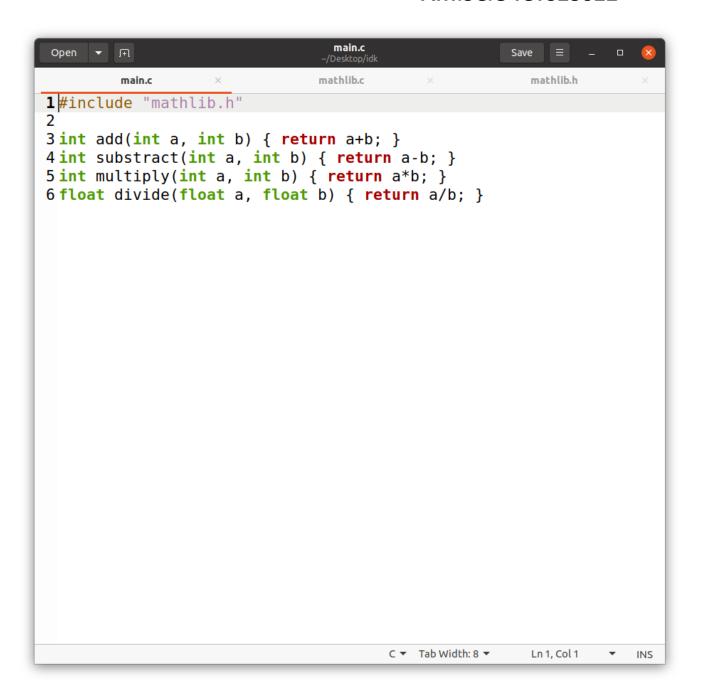
20CYS282

Lab 1

BY

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AM.SC.U4CYS23022



```
mathlib.h
main.c
                                                          mathlib.h
                                 mathlib.c
1#ifndef MATHLIB H
2#define MATHLIB H
4 int add(int a, int b);
5 int substract(int a, int b);
6 int multiply(int a, int b);
7 float divide(float a, float b);
9 #endif
                                 C/ObjC Header ▼ Tab Width: 8 ▼
                                                          Ln 9, Col 7 ▼
                                                                       INS
```

```
mathlib.c
~/Desktop/idk
main.c
                                  mathlib.c
                                                            mathlib.h
1#include <stdio.h>
2 #include "mathlib.h"
3 int main(){
          printf("addition: %d\n", add(5,3));
          printf("substraction: %d\n", substract(5,3));
5
6
          return 0;
7 }
                                           C ▼ Tab Width: 8 ▼
                                                            Ln 7, Col 2 ▼ INS
```

```
seed@VM: ~/.../idk
                                                          seed@VM: ~/.../idk
[02/19/25]seed@VM:~/.../idk$ gcc -c mathlib.c -o mathlib.o
[02/19/25]seed@VM:~/.../idk$ ar rcs libmathlib.a mathlib.o
[02/19/25]seed@VM:~/.../idk$ gcc -c -fPIC mathlib.c -o mathlib.o [02/19/25]seed@VM:~/.../idk$ gcc -shared -o libmathlib.so mathlib.o
[02/19/25]seed@VM:~/.../idk$ gcc main.c -L. -lmathlib -o static_program
[02/19/25]seed@VM:~/.../idk$ gcc main.c -L. -lmathlib -o dynamic_program
[02/19/25]seed@VM:~/.../idk$ export LD_LIBRARY_PATH=.:$LD_LIBRARY_PATH
[02/19/25]seed@VM:~/.../idk$ ./static program
addition: 8
substraction: 2
[02/19/25]seed@VM:~/.../idk$ ./dynamic program
addition: 8
substraction: 2
[02/19/25]seed@VM:~/.../idk$
```