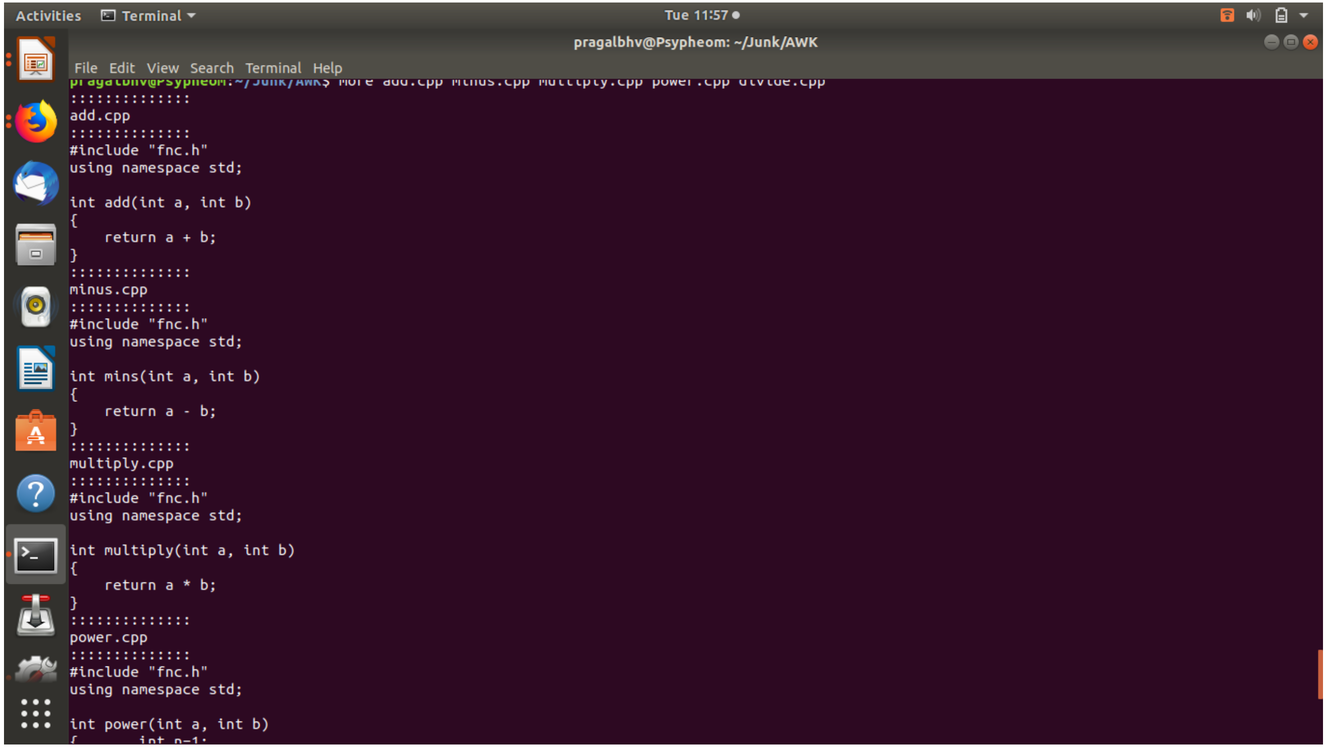
HOMEWORK 5

Makefile

Take one of your old codes, split the code into separate files, one for each function. Create a makefile and test the recompilation


Activities
Terminal
Tue 11:57
pragalbhv@Psypheom: ~/Junk/AWK
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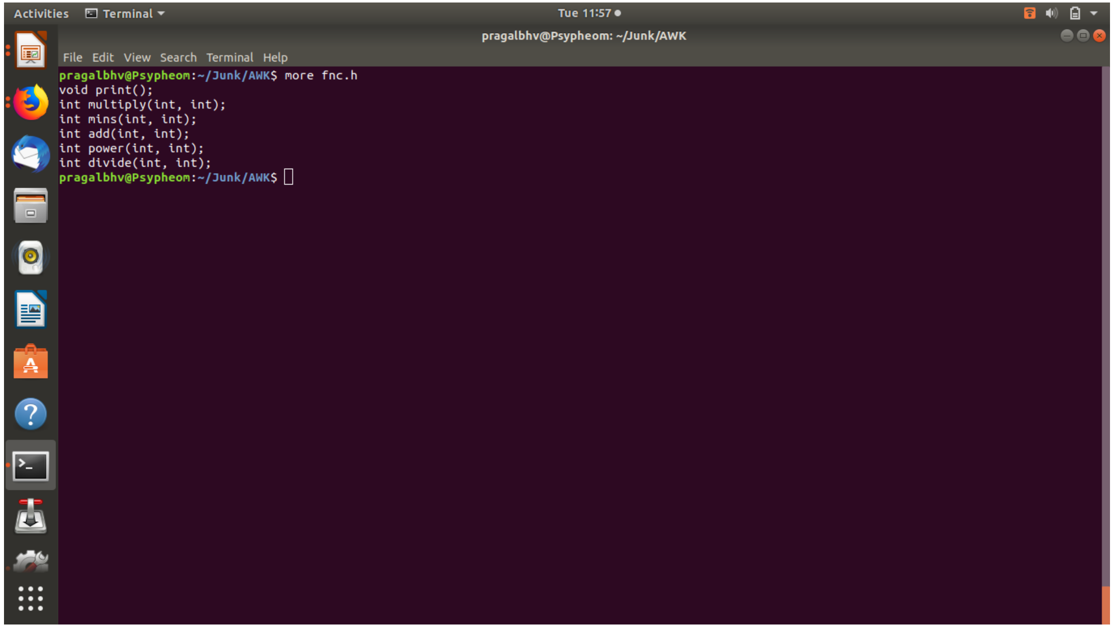
```
pragalbhv@Psypheom:~/Junk/AWK$ more add.cpp minus.cpp multiply.cpp power.cpp divide.cpp
::::::::::::::
add.cpp
::::::::::::::
#include "fnc.h"
using namespace std;

int add(int a, int b)
{
    return a + b;
}
::::::::::::::
minus.cpp
::::::::::::::
#include "fnc.h"
using namespace std;

int mins(int a, int b)
{
    return a - b;
}
::::::::::::::
multiply.cpp
::::::::::::::
#include "fnc.h"
using namespace std;

int multiply(int a, int b)
{
    return a * b;
}
::::::::::::::
power.cpp
::::::::::::::
#include "fnc.h"
using namespace std;

int power(int a, int b)
{       int p=1;
```

Fnc.h



Activities
Terminal
Tue 11:57
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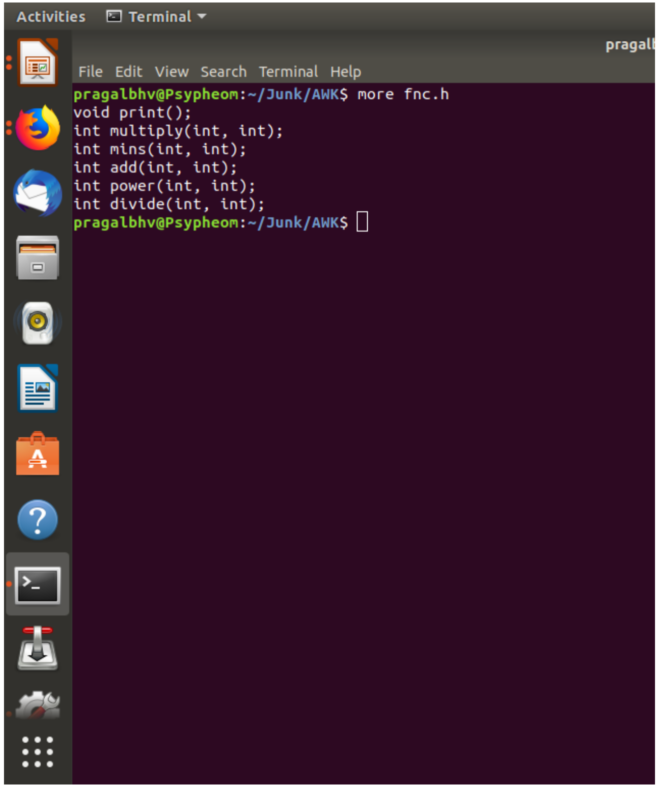
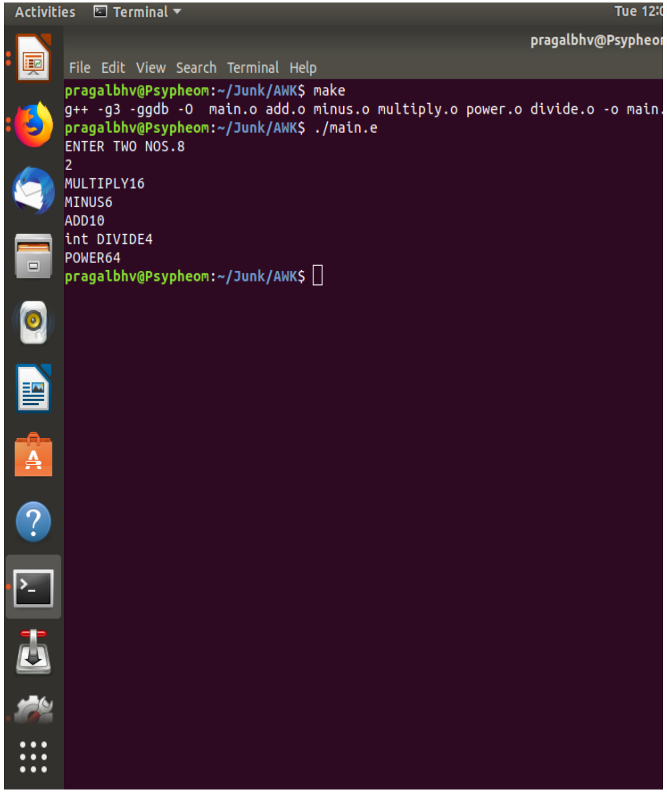
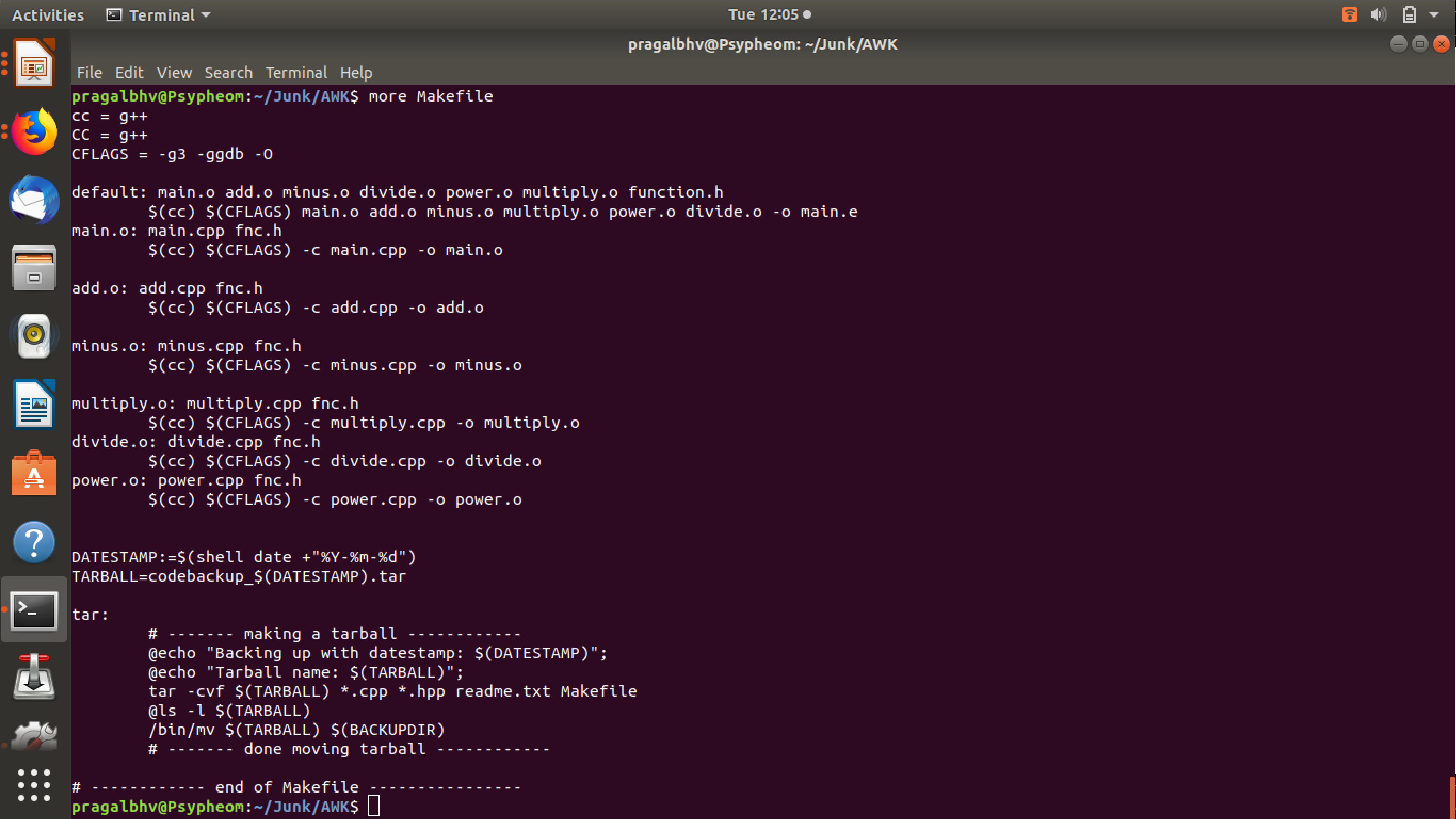
```
pragalbhv@Psypheom:~/Junk/AWK$ more fnc.h
void print();
int multiply(int, int);
int mins(int, int);
int add(int, int);
int power(int, int);
int divide(int, int);
pragalbhv@Psypheom:~/Junk/AWK$ 
```



```
pragalbhv@Psypheom:~/Junk/AWK$ more fnc.h
void print();
int multiply(int, int);
int mins(int, int);
int add(int, int);
int power(int, int);
int divide(int, int);
pragalbhv@Psypheom:~/Junk/AWK$ 
```

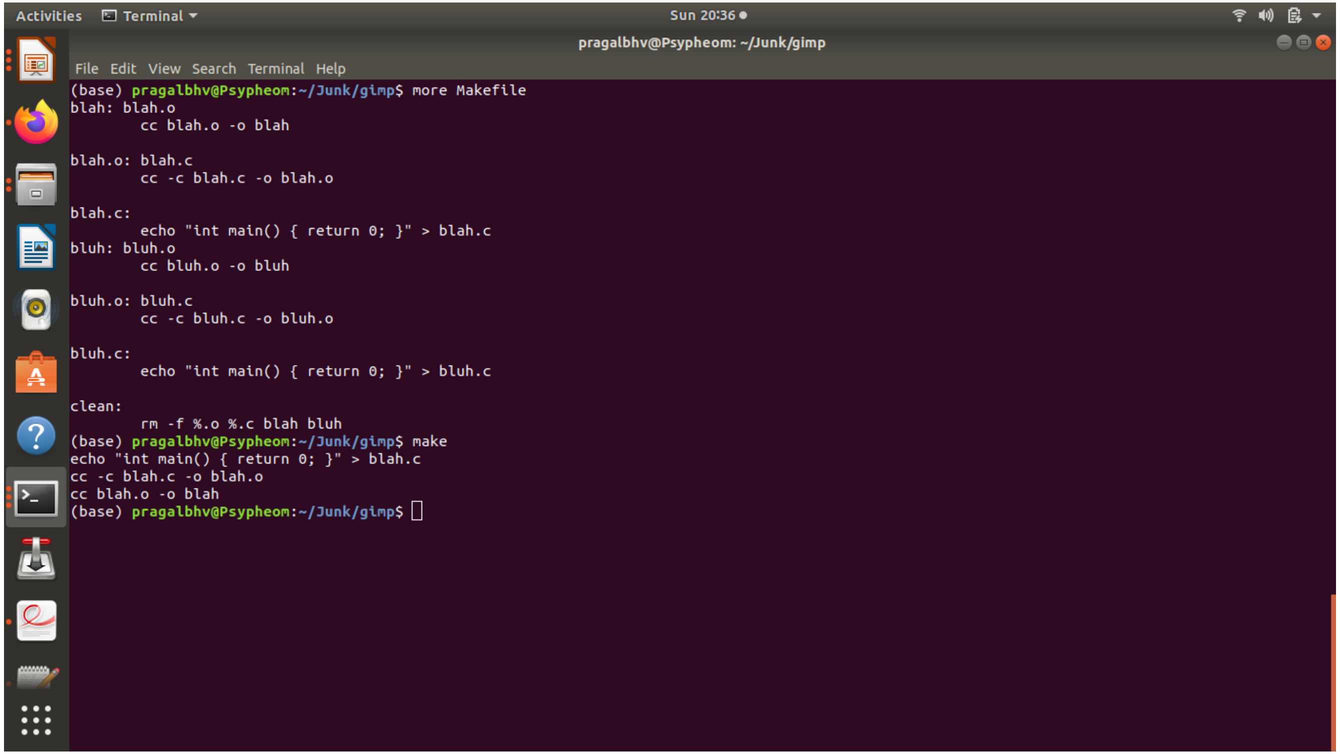


```
pragalbhv@Psypheom:~/Junk/AWK$ make
g++ -g3 -ggdb -O  main.o add.o minus.o multiply.o power.o divide.o -o main.
pragalbhv@Psypheom:~/Junk/AWK$ ./main.e
ENTER TWO NOS.8
2
MULTIPLY16
MINUS6
ADD10
int DIVIDE4
POWER64
pragalbhv@Psypheom:~/Junk/AWK$ 
```



```
pragalbhv@Psypheom:~/Junk/AWK$ more Makefile
cc = g++
CC = g++
CFLAGS = -g3 -ggdb -O

default: main.o add.o minus.o divide.o power.o multiply.o function.h
        $(cc) $(CFLAGS) main.o add.o minus.o multiply.o power.o divide.o -o main.e
main.o: main.cpp fnc.h
        $(cc) $(CFLAGS) -c main.cpp -o main.o

add.o: add.cpp fnc.h
        $(cc) $(CFLAGS) -c add.cpp -o add.o

minus.o: minus.cpp fnc.h
        $(cc) $(CFLAGS) -c minus.cpp -o minus.o

multiply.o: multiply.cpp fnc.h
        $(cc) $(CFLAGS) -c multiply.cpp -o multiply.o
divide.o: divide.cpp fnc.h
        $(cc) $(CFLAGS) -c divide.cpp -o divide.o
power.o: power.cpp fnc.h
        $(cc) $(CFLAGS) -c power.cpp -o power.o


DATESTAMP:=$(shell date +"%Y-%m-%d")
TARBALL=codebackup_$(DATESTAMP).tar

tar:
        # ------- making a tarball -----------
        @echo "Backing up with datestamp: $(DATESTAMP)";
        @echo "Tarball name: $(TARBALL)";
        tar -cvf $(TARBALL) *.cpp *.hpp readme.txt Makefile
        @ls -l $(TARBALL)
        /bin/mv $(TARBALL) $(BACKUPDIR)
        # ------- done moving tarball -----------

# ----------- end of Makefile ---------------
pragalbhv@Psypheom:~/Junk/AWK$ 
```

Create a makefile that uses a pattern for files rather than explicit listing of each of the files.



Activities
Terminal
Sun 20:36
pragalbhv@Psypheom: ~/Junk/gimp
File Edit View Search Terminal Help

```
(base) pragalbhv@Psypheom:~/Junk/gimp$ more Makefile
blah: blah.o
        cc blah.o -o blah

blah.o: blah.c
        cc -c blah.c -o blah.o

blah.c:
        echo "int main() { return 0; }" > blah.c
bluh: bluh.o
        cc bluh.o -o bluh

bluh.o: bluh.c
        cc -c bluh.c -o bluh.o

bluh.c:
        echo "int main() { return 0; }" > bluh.c

clean:
        rm -f %.o %.c blah bluh
(base) pragalbhv@Psypheom:~/Junk/gimp$ make
echo "int main() { return 0; }" > blah.c
cc -c blah.c -o blah.o
cc blah.o -o blah
(base) pragalbhv@Psypheom:~/Junk/gimp$
```