

```
1. #
2. # Makefile
3. #
4. # Computer Science 50
5. # Section 11
6. #
7.
8.
9. # compiler to use
10. CC = clang
11.
12. # flags to pass compiler
13. CFLAGS = -ggdb3 -O0 -Qunused-arguments -std=c99 -Wall -Werror
14.
15. # name for executable
16. EXE = mysum
17.
18. # space-separated list of header files
19. HDRS =
20.
21. # space-separated list of libraries, if any,
22. # each of which should be prefixed with -l
23. LIBS =
24.
25. # space-separated list of source files
26. SRCS = mysum.c sumfunction.c
27.
28. # automatically generated list of object files
29. OBJS = $(SRCS:.c=.o)
30.
31.
32. # default target
33. $(EXE): $(OBJS) $(HDRS) Makefile
34.     $(CC) $(CFLAGS) -o $@ $(OBJS) $(LIBS)
35.
36. # dependencies
37. $(OBJS): $(HDRS) Makefile
38.
39. # housekeeping
40. clean:
41.     rm -f core $(EXE) *.o
```

```
1. #include <stdio.h>
2. #include <stdlib.h>
3.
4. // use the sum function defined in sumfunction.c
5. int sum(int a, int b);
6.
7. int main(int argc, char* argv[])
8. {
9.     // initialize variables to sum
10.    int a = 1;
11.    int b = 2;
12.
13.    if (argc >= 2)
14.        a = strtol(argv[1], NULL, 10);
15.    if (argc >= 3)
16.        b = strtol(argv[2], NULL, 10);
17.
18.    // print out the results of the sum function
19.    printf("%d + %d = %d\n", a, b, sum(a, b));
20. }
```

```
1. Here are some of the sum functions to try on your own:
2.
3. int sum(int a, int b)
4. {
5.     return a + b;
6. }
7.
8. unsigned sum(unsigned a, unsigned b)
9. {
10.     return a + b;
11. }
12.
13. char *sum(char *a, int b)
14. {
15.     return &a[b];
16. }
17.
18.
19. int *sum(int *a, int b)
20. {
21.     return &a[b];
22. }
23.
24. const unsigned char sum[] =
25. {
26.     0x8b, 0x44, 0x24, 0x08, 0x03, 0x44, 0x24, 0x04, 0xc3
27. };
```

```
1. int sum(int a, int b) {  
2.     return a + b;  
3. }
```