

CSE108 – Computer Programming Laboratory

Lab #1

Date: Monday February 11, 2019

Handin: A student with number 20180000001 should hand in three separate files named 20180000001_par1.c, 20180000001_par2.c and 20180000001_par3.c for this lab.

Part 1. [30pts] Write a complete program (in file <student_number>_part1.c) that takes two numbers from the user, adds those two numbers and prints the results as indicated in the following example.

```
$ gcc -o part1 part1.c
$ ./part1
1
4
sum = 5
```

Part 2. [30pts] Write a function (in file <student_number>_part2.c) that takes five integer arguments and returns the maximum. The function header is given below.

```
int find_max_of_five(int a1, int a2, int a3, int a4, int a5)
```

Part 3. [40pts] Write a procedure (in file <student_number>_part3.c) that takes two strings representing binary numbers. The function adds these two binary numbers and returns the result in a string argument. The function header is:

```
void add_binary(char * b1, char *b2, char * result)
```

Assume that result is already allocated by the caller. An example use of this function:

```
...
int main() {
    char b1[] = "1001110";
    char b2[] = "101";
    char r[100];
    add_binary(b1, b2, r);
    printf("%s + %s = %s\n", b1, b2, r);
}
```

would print out:

```
1001110 + 101 = 1010011
```