

Computer Science 801

Fall 2000

Programming Lab 2

Tuesday, 10/19/2000

Program 1

1. Write a program called `avg.c` that reads in 3 integers from the user, computes their sum and average, and outputs that information. Here's what a sample run of the program might look like:

```
Enter the first integer: 7
Enter the second integer: 19
Enter the third integer: 6

The sum of 7, 19, and 6 is 32
The average of 7, 19, and 6 is 10.33
```

2. Create a file with 3 integers, one per line, called `avg.in` and use it as input to the above program through the input redirection operator (`<`).
3. Redirect the input and output of your file and store the output in a file called `avg.txt`.

Program 2

1. Write a program called `temp.c` that inputs a temperature in Kelvin from the user and outputs its Celsius and Fahrenheit equivalents. Note that

$$C = K - 273$$
$$F = (9/5)C + 32$$

A sample run follows:

```
Enter a temperature in K: 300

300 K is equivalent to 27 C or 80.6 F
```

2. Try various temperatures to test your program. Store the results for 3 runs where the input is 273, 373, and 0 in a file called `temp.txt`.