

Mathematics 1266 (C Programming) Hilary 2019, second assignment

February 4, 2019

due by 9am Monday 11/2/19

Your program is to read in (double precision) numbers from the keyboard, count them, and print out the number read.

For example: in the example below, the numbers are not input from the keyboard, but from the file `y`. This is called *input redirection*.

```
prompt% cat y
```

```
13 17 19 17 25 17 19 17 23 17 19
23 17 19 17 77 17 19 17 23
23 17 19 17 69 17 19 17 23 17 19 17 25 17 19 17
23 17 19 17 71 17 19 17 23
23 17 19 17 69 17 19 17 23 17 19
23 17 19 17 75 17 19 17 23 17 19 17 25
23 17 19 17 69 17 19 17 23 17 19
23 17 19 17 71 17 19 17 23 17 19 17 25 17 19 17
23 17 19 17 77 17 19 17 23 17 19 17
23 17 19 17 69 17 19 17 23
```

```
prompt% a.out < y
```

```
There were 117 numbers read
```

```
prompt%
```

Points to note.

- These points are just repeated from the first assignment.
- Make sure your program works, *on the maths machines*, or at least that it ‘compiles.’ It is bad if a program is not working properly, but the *worst* thing you can do is to submit a program which does not compile on the maths machines.

Some maths machines run Linux and some run FreeBSD. To find out which system you are using, type

```
echo $OSTYPE
```

- In programming, it is very important to follow a specification *exactly*, and for this reason you will always be expected to follow the specification *exactly*. In the above 400-line poem, the spelling, capitalisation, punctuation, and line-breaks must be followed exactly.
- You should use indentation to make the program as easy to read as possible. Statements between curly braces should be indented, and so on.
- For the `submit-work` software: steps in using it are illustrated by a series of screenshots on the course web-page.
- See below how *comments* can be written in a program ...

Appropriate indentation:

```
#include <stdio.h>    /* at start of line */

main ()              /* at start of line */
{                   /* brace at start of line */
    printf("hello\n");
                    /* indent two places, for readability */

    printf("goodbye\n"); /* indent two places, for readability */
}                   /* brace at start of line */
```