

Lab Two

ID1063: Introduction to Programming

1. Read, compile and run each of `int-example.c`, `circle-example.c`, `char-example.c`, `abs-example.c`. Each of these program files contains instructions in the form of comments to modify the code. Implement those instructions.
2. The value computed by $\frac{|a+b|+|a-b|}{2}$ is equal to a or to b . When is it equal to a and when is it equal to b ? Use this idea and the function from `abs-example.c` to accept two integers from the user and print the maximum of the two numbers as well as the minimum of the two numbers.
3. Accept an English letter from the user and an integer n ; shift the letter by n . For example, if the character is 'a' and $n = 3$, the output is 'd'. If the character is 'x' and $n = 5$, the output is 'c'.

Hint: Use ideas from both `int-example.c` and `char-example.c`

4. **Optional:** Including the header file `math.h` allows you to compute square-roots and natural logarithms with the functions `sqrt()` and `log()` respectively. Try them and other functions that can be accessed by including this header file.