# COMP20003 2020

# Assignment 1 Marking Scheme

# Code (8 marks possible / 4 marks if failing testing)

/8

Functionality (7)

- + Correctly inserts and finds key with single item in dictionary (1)
- + Can find all data for ten unique keys inserted in dictionary (1)
- + Finds all duplicates for duplicate keys (1)
- + Is able to store maximum key/data lengths and maximum buffer size (1)
- + Is able to lookup item with maximum field size key (1)
- + Correctly handles quoted csv values looked up with unquoted key (1)
- + Correctly handles quoted csv values with double quotes (1)
- + Correctly handles final line without terminating newline (0.5)
- Incorrect amount of space allocated (e.g. 128 bytes for each value or missing space for termination/newline/return/etc.) (-1)
- Structures passed by data structure value rather than as a pointer (-1)
- Data not freed in first three tests (-1)
- './prog input output < keys' not followed (-2)
- Output sent to wrong place (-1)

# If Fails Automatic Testing (3)

- + Program appears to have correct logic (1)
- + Data item creation looks ok apart from inserting same key (1)
- + Everything looks like it should work apart from small error (0.5) which is not mentioned by valgrind (0.5)
- + Data structure incorrectly declared (too much space, unreasonable static size declaration, etc.) (-1)

## Makeable (1)

- + Project can be compiled using 'make' commands (1)
- Automatic fixing required (-0.25)
- Significant automated fixing required (-0.5)
- Makefile file is not named correctly to be used by 'make' (-0.25)

# Programming Style (2 marks possible)

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## Code Safe

- Did not check return value of mallocs (-0.25)
- Did not check return value of file opens (-0.25)

## Code Self-Documenting

- Functions poorly named (not representative of action performed) (-0.5)
- Variables poorly named (not representative of meaning of values contained) (-0.25)

#### Code Well Documented

- Insufficient commenting (-0.5)

#### Consistency

- Indentation inconsistent (-0.5)
- Bracket placement inconsistent (-0.25)
- Lots of unnecessary blank space (-0.25)

### Modularity

- Used Headers and Source files incorrectly (-0.25)
- Code not split up into separate files sensibly (-0.25)
- Print statements inside library functions (-0.25)
- Search/Insert logic included outside dictionary code (-0.25)
- All code in a single file (-1)