Fall 2023 Midterm Test

CSC 209 H1F

Duration: **50 minutes**

Question 1. Answer the following by circling either the **T** (for true) or **F** (for false) that precedes each question. Any ambiguous circling will be simply considered wrong, please use caution. [6 marks]

Part (a) **T** | **F** We have to use `gcc` each time we want to *use* a program that is written in C. [1 mark]

Part (b) **T** | **F** C-strings are terminated with a special character called a null character which has a *standard numerical value* of 0. [1 mark]

Part (c) **T** | **F** Pointers take up different space in memory depending on the type that they intend to point to, e.g. `sizeof(char *) != sizeof(long *)` . [1 mark]

Part (d) **T** | **F** `free` can also be used for filling arrays *on the stack* with the value 0. [1 mark]

Part (e) **T** | **F** C-strings stored in arrays on the stack often don't need to be null-terminated because `sizeof` will tell you the string's length. [1 mark]

Part (f) **T** | **F** We use `'.o'` files, partially because this helps limit the amount of compilation that