CS 2211 - Winter 2024 - Assignment 3 Marking Scheme

Part 1 - compress.c

	Student Mark	Out of	Comments
Functions			
main() - Declares array and calls read_input() and compress()	4	4	
read_input() - Reads until EOF, skips whitespace, stores non-whitespace in the array, returns the count	7	7	
compress() - Compresses data, prints it in the correct format	7	7	
Tests			
Test cases	12	12	
Deductions		**Deduct Up To**	
Uses one or more global variables (-1.5)	0	-1.5	
Results are generally correct, but use an incorrect output format, preventing automated tests from running (-3)	0	-3	
File is not named compress.c, preventing automated tests from running (-1.5)	0	-1.5	
Compilation produces warnings (-1.5)	0	-1.5	
Total Marks	**30.00**	**30.00**	
Weighted at 25%	**25.00**	**25.00**	

Part 2 - decompress.c

	Student Mark	Out of	Comments
main() - Reads until EOF, decompresses data, prints it in the correct format	8	8	
Tests			
Test cases	12	12	
Deductions		**Deduct Up To**	
Uses one or more global variables (-1)	0	-1	
Results are generally correct, but use an incorrect output format, preventing automated tests from running (-2)	0	-2	
File is not named decompress.c, preventing automated tests from running (-1)	0	-1	
Compilation produces warnings (-1)	0	-1	
Total	**20.00**	**20.00**	
Weighted at 10%	**10.00**	**10.00**	

Part 3 - tictactoe.c

	Student Mark	Out of	Comments
Functions			
main() - Declares array and calls helper functions	5	5	
print_board() - Prints the game board with row / column numbers	4	4	
prompt_user() - Prompts the user for a move; reprompts if position already taken or invalid input (numbers, letters) provided	5	5	
check_win() - Correctly checks if the board has a win; prints appropriate message if a win is found	5	5	
computer_move() - Correctly handles the computer's move. Keeps trying if a chosen move is already taken	4	4	
Program checks for a win after each move (not each round)	2	2	
Tests			
Correctly handles player win	5	5	
Correctly handles computer win	5	5	
Correctly handles cat's game	5	5	
Deductions		**Deduct Up To**	
Uses one or more global variables (-2)	0	-2	
Seeds the random number generator multiple times (-1)	0	-1	
File is not named tictactoe.c, preventing automated tests from running (-2)	0	-2	
Compilation produces warnings (-2)	0	-2	
Total Marks	**40.00**	**40.00**	
Weighted at 65%	**65.00**	**65.00**	

Style and Commenting (capped to 10% of assignment total below)

	Deduction	Deduct Up To	Comments
Uses any convention for identifiers (variable names, function names) other than snake_case		-2	
Uses any style for braces other than Allman / BSD (braces on a separate line)		-2	
Uses tabs for indentation or anything other than 4 spaces per indentation level		-2	
Non-existent, sparse, or unclear comments throughout program to describe the code		-5	
One or more variable declarations left uncommented		-2	
One or more files missing a file header comment containing student's name, assignment number, purpose of the file		-2	
One or more functions missing a function header comment describing purpose of function, parameters, and return value		-2	
Code is generally messy / unreadable		-5	
Code contains magic numbers instead of constants		-2	
Total Deductions (capped at 10%)	**0.00**		

Deductions

	Deduction	Deduct Up To	Comments
asn3 directory is not at the root of the repository: -2 marks		-2	
Additional files included in repository (binaries, .o files, etc.): -0.5 marks per instance, up to -2 max	0	-2	
Late penalty (first 24 hours: -10 marks; next 24 hours: -25 marks; after 48 hours: -100 marks)	0	-100	
Total Deductions	**0.00**		

Summary

	Student Mark	Out of	Comments
Part 1	25.00	25.00	
Part 2	10.00	10.00	
Part 3	65.00	65.00	
Style and Commenting Deductions	0.00		
Other Deductions	0.00		
Assignment Total	**100.00**	**100.00**	