Summary

Name Jack Rutherford

	Assigned	Possible
Correct file and folder names are used	2	3
C-level	24.5	25
B-level	15	17.5
A-level	0	8
Total	41.5	53.5

Score 78

The assignment specification indicated that calculator-C-level and calculator-B-level folders should be in a folder named calculator

C-level

Item	Assigned	Possible	Comment
Appropriate separation of code between main and getop exists	1	1	
e is recognized as a value	1	1	
e can be used in an expression	1	1	
pi is recognized as a value	1	1	
pi can be used in an expression	0.5	1	If I run the following 2 commands in succession, the program encounters a segmentation fault. e 1 - e pi + 1 + Running these commands individually still works, however. This occurs because the value of i isn't initialized before the code recognizing e and pi. Instead it only happens when a digit is recognized
/ character correctly recognized as division	1	1	
/ correctly performs division	1	1	
Result of division is pushed onto the stack	1	1	
Correct check for division by 0 is implemented	1	1	
Remainder of expression is ignored if division by 0 is attempted	1	1	
Subsequent expression can be evaluated correctly after divide by 0 is attempted	1	1	
* character recognized as multiplication	1	1	
* correctly performs multiplication	1	1	
Result of multiplication is pushed onto the stack	1	1	
^ is recognized as exponentiation	0.5	0.5	
** is recognized as exponentiation	0.5	0.5	

	C-level	
Exponentiation is performed correctly	1	1
Result of exponentiation is pushed onto the stack	1	1
% correctly recognized as modulo	1	1
Operands for % are cast to integers before performing operation	1	1
Correct operand used for the numerator	1	1
Correct operand used for the denominator	1	1
Correct check for division by 0 is implemented	1	1
Result pushed onto the stack correctly	1	1
Remainder of expression is ignored if mod by 0 is attempted	1	1
Subsequent expression can be evaluated correctly after mod by 0 is attempted	1	1
Total	24.5	25

Other comments

B-level

Item	Assigned	Possible	Comment
<math.h> included in code	0.5	0.5	
<string.h> included in code	0.5	0.5	
sine function correctly recognized	1	1	
sine function recognized in main, not getop	0.5	0.5	
sine function computes sine of the value on the top of the stack	1	1	
Operand is converted to radians correctly	1	1	
Result of executing sine function is pushed onto the stack	1	1	
cosine function correctly recognized	1	1	
cosine function recognized in not main, not getop	0.5	0.5	
cosine function computes cosine of the value on the top of the stack	1	1	
Operand is converted to radians correctly	1	1	
Result of executing cosine function is pushed onto the stack	1	1	
tangent function correctly recognized	1	1	
tangent function recognized in main, not getop	0.5	0.5	
tangent function computes tangent of the value on the top of the stack	1	1	
Operand is converted to radians correctly	1	1	
Other string of characters treated as functions and cause error message to be displayed	0.5	1	If I try an invalid function that starts with either p or e, the error message doesn't show the full function name.
e and pi still correctly recognized	1	1	
Program parses command line arguments as expressions to be evaluated correctly	0	1	Nothing is implemented for this aspect of the project
Values of the expressions present as command line arguments are correctly computed and displayed	0	1	
Total	15	17.5	

Other comments

A-level

Item	Assigned	Possible	Comment
Memory locations 0 through 9 are declared in the code	0	1	Nothing is turned in for the A level
Array, rather than 10 separate variables, is used to store memory values	0	0.5	
All 10 memory locations are initialized to 0	0	1	
Operation to store a value into a memory location is executed correctly when it occurs before the end of an expression	0	1	
Operation to store a value into a memory location is executed correctly when it occurs at the end of an expression	0	1	
Value on the top of the stack is not removed from the stack by a memory store operation	0	0.5	
Reading a variable correctly recognized before the end of an expression	0	1	
Reading a variable correctly recognized at the end of an expression	0	1	
Value of variable pushed onto the stack when it is encountered	0	1	
Total	0	8	

Other comments