Summary

Name Jack Rutherford

	Possible	Assigned
Error Handling	3.5	4.5
Conversions to decimal	10.5	12.5
Conversions from decimal	9	12
Main function	4.5	5
Total	27.5	34

Score 81

Error Handling

Item	Assigned	Possible	Comment
Program prints error message if fewer than 2 command line arguments are passed	1	1	
Error message displayed matches the one specified in the requirements	0.5	0.5	
Error message displayed if an invalid number base is given for one of the command line arguments	0.5	1	If I pass 0c1011 as a number to be converted, no error message is displayed, but a value of -1 is displayed
Processing continues when an invalid number base is given	0.5	0.5	
Error message displayed in an invalid number is passed for conversion	0.5	1	As with an invalid number base, the value -1 is displayed instead of the error message shown in the assignment description
Processing continues when an invalid number is given	0.5	0.5	
Total	3.5	4.5	

Other comments

Conversions TO decimal

Item	Assigned	Possible	Comment
Program correctly converts valid binary values to decimal	2	2	
Program returns -1 when non-binary character included in argument to a2toi	1	1	
Program correctly converts valid octal values to decimal	2	2	
Program returns -1 when non-octal character included in argument to a8toi	1	1	
Program correctly converts valid base 10 values to decimal	2	2	
Program returns -1 when non-digit character included in argument to a10toi	1	1	
Program correctly converts valid hex values to decimal	1	2	If a letter is given, it is converted to an integer in the same way that a digit is, which gives an incorrect integer value.
Program allows both upper and lower case versions of letters a-f in hex value	0	0.5	
Program returns -1 when non-hex character included in argument to a16toi	0.5	1	The code allows for characters 'A' through 'Z' instead of 'A' through 'F'.
Total	10.5	12.5	

Other comments

Conversions FROM decimal

Item	Assigned	Possible	Comment
toBinary function correctly converts numbers to string in binary format	1	2	The output values are in reverse order
toBinary function always returns string with leading 1	1	1	
toOctal function correctly converts numbers to string in octal format	2	2	
toOctal function always returns string that starts with non-zero value	1	1	
toDecimal function correctly converts numbers to string in decimal format	1	2	The value "ind" in the toDecimal function is never modified in the while(integer) loop, so this function doesn't work correctly.
toDecimal function always returns string that starts with non-zero value	1	1	
toHex function correctly converts numbers to string in hex format	1	2	Line 185 adds '0' to the value of c. This means it will never e 10, 11, 12, …, 15, so the conversions to 'A', 'B', …, 'F' won't work. For values that are digits, another '0' is added on line 224.
toHex function always returns string that starts with non-zero value	1	1	
Total	9	12	

Other comments

Main function

Item	Assigned	Possible	Comment
Each of the specified output formats is recognized correctly	1	1	
Program displays output in requested format	1.5	2	The base of the number in the output doesn't always match the number's actual base. If I run the program with octal as the output format, and give the arguments 0252 170 as the numbers to be converted, the output shows both numbers as being in octal I believe this is because the code on line 277 doesn't consider decimal as an option, and so it uses whatever value of "state" that was set previously.
Each command line argument is interpreted as a number	2	2	
Total	4.5	5	

Other comments