Lab 2

Lab02_starting.ipynb

1. Write an expression that will cause the following code to print "30 or less" if the value of user input is 30 or less. (25%)

Test Case[1]

Test No	Input	Output
1	30	30 or less
2	25.6	30 or less
3	54	Over 30
4	Thirty	Please input a number!
Your Test Case		

2. Write a program that reads a floating-point number and prints “zero” if the number is zero. Otherwise, print “positive” or “negative”. Add “small” if the absolute value of the number is less than 1,000,000 or “large” if it exceeds 1,000,000. (25%)

Test Case

Test No	Input	Output
1	0	zero
2	2000002.56	large positive
3	-3020000	large negative
4	302	small positive
Your Test Case		

[1] The specified test cases can be used to evaluate the effectiveness of the program. Furthermore, you are required to design and run your own test case as well at the Peer-review phase of the lab assignment.

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3. Write an if-else statement with multiple branches.

   If year is 2101 or later, print "Distant future" (without quotes). Otherwise, if year is 2001 or greater, print "21st century". Otherwise, if year is 1901 or greater, print "20th century". Else (1900 or earlier), print "Long ago". (25%)

Test Case

Test No	Input	Output
1	2101	Distant future
2	1889	Long ago
3	2002	21st century
4	1901	20th century
Your Test Case		

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4. Write a program that reads a temperature value and the letter C for Celsius or F for Fahrenheit. Print whether water is liquid, solid, or gaseous at the given temperature at sea level. (25%)

Test Case

Test No	Input	Output
1	0, c	At that temperature, the water is liquid.
2	31, F	At that temperature, the water is solid.
3	101, C	At that temperature, the water is gaseous.
4	212, f	At that temperature, the water is gaseous.
Your Test Case		