Testing

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Menu	Entering a input to make sure it goes to the correct option or results in a appropriate error message	Checking with entering '1'	goes to 'Calculate molar weight, density or number of mols'	as expected	passed	nothing to fix
Menu	Entering a input to make sure it goes to the correct option or results in a appropriate error message	Checking with entering '2'	goes to 'Acidity(pH), making a solution and dilutions'	as expected	passed	nothing to fix
Menu	Entering a input to make sure it goes to the correct option or results in a appropriate error message	Checking with entering '3'	goes to 'Identify Chemicals and Chemical formulas''	as expected	passed	nothing to fix
Menu	Entering a input to make sure it goes to the correct option or results in a appropriate error message	Checking with entering '4'	goes to 'Element data from the periodic table'	as expected	passed	nothing to fix

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Menu	Entering a input to make sure it goes to the correct option or results in a appropriate error message	Checking with entering '5'	Exits program with 'goodbye message'	as expected	passed	nothing to fix
Menu	Entering a input to make sure it goes to the correct option or results in a appropriate error message	Checking with entering 'w'	returns error message and loops back to main menu	as expected	passed	nothing to fix
Menu	Entering a input to make sure it goes to the correct option or results in a appropriate error message	Checking with entering '?'	returns error message and loops back to main menu	as expected	passed	nothing to fix

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Element data from the periodic table	Entering a input to make sure it returns the correct data for that element	Checking with entering 'Carbon'	returns data for 'Carbon	as expected	passed	nothing to fix

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Element data from the periodic table	Entering a input to make sure it returns the correct data for that element	Checking with entering 'carbon'	returns error message and loops back to main menu	as expected	passed	nothing to fix
Element data from the periodic table	Entering a input to make sure it returns the correct data for that element	Checking with entering 'Carbon1'	returns error message and loops back to main menu	as expected	passed	nothing to fix
Element data from the periodic table	Entering a input to make sure it returns the correct data for that element	Checking with entering '1'	returns error message and loops back to main menu	as expected	passed	nothing to fix
Element data from the periodic table	Entering a input to make sure it returns the correct data for that element	Checking with entering 'W'	returns error message and loops back to main menu	as expected	passed	nothing to fix
Element data from the periodic table	Entering a input to make sure it returns the correct data for that element	Checking with entering '?'	returns error message and loops back to main menu	as expected	passed	nothing to fix

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Calculate molar weight	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	How many elements in the compound - check with entering '1', What is the element (enter Symbol) - 'C', How many elements? - '1'	returns output 12.011 g/mol	as expected	passed	nothing to fix
Calculate molar weight	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	How many elements in the compound - check with entering 'W', What is the element (enter Symbol) - 'C', How many elements? - '1'	returns error message and asks for 'How many elements in the compound' again	as expected	passed	nothing to fix
Calculate molar weight	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	How many elements in the compound - check with entering '1', What is the element (enter Symbol) - '1', How many elements? - '1'	returns error message and asks for ' What is the element (enter Symbol) again	as expected	failed	need to fix

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Calculate molar weight	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	How many elements in the compound - check with entering '1', What is the element (enter Symbol) - 'C', How many elements? - 'C'	returns error message and asks for 'How many elements in the compound' again	as expected	passed	nothing to fix
Calculate density	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - '1' , What is the volume - '3'	returns output of 0.33 g/cm3	as expected	passed	nothing to fix
Calculate density	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - 'W' , What is the volume - '3'	returns error message and asks for 'what is the mass' again	as expected	passed	nothing to fix

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Calculate density	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - '1' , What is the volume - 'W'	returns error message and asks for 'what is the volume' again	as expected	passed	nothing to fix
Calculate density	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - '?' , What is the volume - '3'	returns error message and asks for 'what is the mass' again	as expected	passed	nothing to fix
Calculate density	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - '3' , What is the volume - '?'	returns error message and asks for 'what is the volume' again	as expected	passed	nothing to fix

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Calculate number of mols	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - '3' , What is the molecular mass - '3'	returns output 1 mol	as expected	passed	nothing to fix
Calculate number of mols	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - 'W' , What is the molecular mass - '3'	returns error message and asks for 'what is the mass' again	as expected	passed	nothing to fix
Calculate number of mols	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - '3' , What is the molecular mass - 'W'	returns error message and asks for 'what is the molecular mass' again	as expected	passed	nothing to fix

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Calculate number of mols	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - '3' , What is the molecular mass - '?'	returns error message and asks for 'what is the molecular mass' again	as expected	passed	nothing to fix
Calculate number of mols	Entering the correct inputs to make sure it goes to the correct output or results in a appropriate error message	What is the mass - '?' , What is the molecular mass - '3'	returns error message and asks for 'what is the mass' again	as expected	passed	nothing to fix

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Calculate Acidity	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the concentration - '78'	returns output 1.8921 base solution	as expected	passed	nothing to fix

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Calculate Acidity	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the concentration - 'W'	returns error message and asks for 'what is the concentration' again	as expected	passed	nothing to fix
Calculate Acidity	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the concentration - '?'	returns error message and asks for 'what is the concentration' again	as expected	passed	nothing to fix
Making a solution	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the formula of the solute? 'H20', How many grams of solute? '1' , How many liters of solution '1'	returns output 0.0496	as expected	passed	nothing to fix
Making a solution	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the formula of the solute? '1', How many grams of solute? '1' , How many liters of solution '1'	returns not a valid solute and returns to main menu	as expected	passed	nothing to fix

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Making a solution	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the formula of the solute? 'H20', How many grams of solute? 'W' , How many liters of solution '1'	returns 'How many grams of solute' again	as expected	passed	nothing to fix
Making a solution	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the formula of the solute? 'H20', How many grams of solute? '1' , How many liters of solution 'W'	returns 'How many litres of solution' again	as expected	passed	nothing to fix
Calculate dilutions	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the formula of the solution - 'H20', What is the volume of the solution - '10', What is the molarity of the solution - '30', What is the molarity after dilution -'50'	solute - H20, molarity - 50 , volume - 6	as expected	passed	nothing to fix

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Calculate dilutions	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the formula of the solution - 'H20', What is the volume of the solution - 'W', What is the molarity of the solution - '30', What is the molarity after dilution -'50'	returns not a valid input - asks again	as expected	passed	nothing to fix
Calculate dilutions	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the formula of the solution - 'H20', What is the volume of the solution - '10', What is the molarity of the solution - 'W', What is the molarity after dilution -'50'	returns not a valid input - asks again	as expected	passed	nothing to fix
Calculate dilutions	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	What is the formula of the solution - 'H20', What is the volume of the solution - '10', What is the molarity of the solution - '30', What is the molarity after dilution -'W'	returns not a valid input - asks again	as expected	passed	nothing to fix

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments

Testing	Test Case	Test Data	Expected Result	Actual Result	Status	Comments
Identify chemical formula	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical name to identify its chemical formula - Ammonium phosphate	(NH4)3PO4	as expected	passed	nothing to fix
Identify chemical formula	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical name to identify its chemical formula - ammonium phosphate	chemical not found	as expected	passed	nothing to fix
Identify chemical formula	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical name to identify its chemical formula - Ammonium phosphate1	chemical not found	as expected	passed	nothing to fix
Identify chemical formula	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical name to identify its chemical formula - 1	chemical not found	as expected	passed	nothing to fix

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Identify chemical formula	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical name to identify its chemical formula - ?	chemical not found	as expected	passed	nothing to fix
Identify chemical	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical formula to identify the chemical - C7H6O3	Salicylic Acid	as expected	passed	nothing to fix
Identify chemical	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical formula to identify the chemical - C7H6O4	chemical formula not found	as expected	passed	nothing to fix
Identify chemical	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical formula to identify the chemical - 1	chemical formula not found	as expected	passed	nothing to fix

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Identify chemical	Entering the correct input to make sure it goes to the correct output or results in a appropriate error message	Enter the chemical formula to identify the chemical - ?	chemical formula not found	as expected	passed	nothing to fix

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Quit	does pressing the quit button exit the program	pressing the buttton	exit the program	exited the program	passed	nothing to fix