1. Write a Python script to compare two numbers and print whether the first is greater.
2. Check if a given number is between 10 and 50.
3. Write a program that checks if a number is positive and even using logical `and`.
4. Given two strings, check if either string is empty using logical `or`.
5. Use `not` to flip a boolean variable and print its new value.
6. Evaluate and explain: `5 > 3 and 2 < 4`
7. Determine the output: `not (3 == 3 or 4 > 5)`
8. Write a program to check if a variable is `None` using `is`.
9. Check if two variables point to the same object using `is`.
10. Create two identical lists and compare them using `==` and `is`.

11. What will be the result of `True and not False or False and True`? Break down its precedence.
12. Write a function that returns `True` if a value is falsy.
13. Implement a condition to check if a string is not empty and contains the word "Python".
14. Create a truth table for `A and B or not A` with all possible combinations.
15. Compare identity and equality with numbers and strings — explain when they behave differently.
16. Write a function that checks if a list is empty **without** using `len()`.
17. Evaluate: `None == False`, `None is False`, `[] == []`, `[] is []` and explain.
18. Make a calculator that returns result **only** if all inputs are truthy; else returns `'Invalid Input'`.
19. Compare how `not (x and y)` differs from `not x or not y` using DeMorgan's Laws.
20. Assign a complex logical expression to a variable and explain it step-by-step using print statements.