IF

1. **Check if a Number is Even or Odd**

- Declare a variable `num` with a number value. Write code that prints "Even" if `num` is even, or "Odd" if it is odd.

2. **Check if Two Numbers are Both Positive**

- Declare two variables, `num1` and `num2`, with number values. Write code that prints "Both are positive" if both numbers are greater than 0, or "At least one is not positive" if at least one number is not positive.

3. **Check if a Number is in a Range**

- Declare a variable `num` with a number value. Write code that prints "In range" if `num` is between 10 and 20 (inclusive), or "Out of range" if it is not.

4. **Check if a Word Contains Both 'a' and 'e'**

- Declare a variable `word` with a string value. Write code that prints "Contains both 'a' and 'e'" if `word` contains both characters, or "Does not contain both" if it does not.

\* rewrite your code to include an appropriate message for when the string contains only one of the letter

\* edit your code to include a message for when none of the letters appeared in the string

5. **Choose a List or String Operation**

- Declare a variable `data` with either a list or a string value. Write code that checks if `data` is a list and has more than 5 elements, printing "Long list" if true, or "Short list" if false. If `data` is a string, check if its length is more than 5 characters and print "Long string" or "Short string". Use `elif` to handle the different data types.

6. **Check for Specific Methods and Indexing**

- Declare a variable `data` with either a list or a string value. Write code that checks if `data` is a list and has more than 3 elements, printing the list with the `.reverse()` method applied. If `data` is a string, print the string from index 2 to the end. Handle any other type of input appropriately.

7. **Complex Condition with and, or, and not**

- Declare three variables, `num1`, `num2`, and `num3`, with number values. Write code that prints "Valid" if all the conditions are true:

- `num1` is positive

- `num2` is either less than 5 or greater than 20

- `num3` is not equal to 10

Otherwise, print "Invalid".