ALA-1: Attendance Analyzer Program

Aim: To write a Python program to calculate attendance percentage and check eligibility for the exam.

- **Error code:**

```
print("Water Bill")
units = float(input("Enter units: "))
if units <= 50:
 bill = units * 2
elif units <= 100:
 bill = units * 5
else:
 bill = units * 8
tax = bill * 0.05
total = bill + tax
print("Total:", total)
for i in range(3):
   print("Generated")
print("End")
```

Output:

- **List of Errors:**

1. Missing Colons (:)

In Python, every if, elif, else, and for statement must end with a colon.

- **Error:** if units <= 50, elif units <= 100, else, and for i in range(3) are all missing the :.

2. Data Type Mismatch

The input() function always captures data as a **string** (text). You cannot perform math or comparisons (like <= 50) on a string.

- **Error:** You need to convert the input to an integer or float using int() or float().

3. Indentation Error

Python uses spacing to know which code belongs inside a loop or a condition.

- **Error:** The print("Generated") line inside your for loop is not indented.

4. Case Sensitivity

Python treats total and Total as two completely different variables.

- **Error:** You defined the variable as total (lowercase) but tried to print Total (uppercase).

- **Correct Code:**

```
print("Water Bill")
units = float(input("Enter units: "))
if units <= 50:
 bill = units * 2
elif units <= 100:
 bill = units * 5
else:
 bill = units * 8
tax = bill * 0.05
total = bill + tax
print("Total:", total)
for i in range(3):
   print("Generated")
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Output: