**Activity: OCP Dilemma**

**Instructions:**

You're maintaining a system for generating **employee performance reports** in different formats. Right now, adding a new report format means **editing the core class**, which breaks the Open-Closed Principle (OCP).

🔧 Your Mission:

1. Review the code below.
2. Identify how it violates the **Open-Closed Principle**.
3. Refactor the code using **abstraction and polymorphism**.
4. Extend it by adding a new report type called SummaryReport **without modifying the existing logic**.

📂 **Filename:** python\_activity17.py

**❌ Original Code (Violates OCP):**

class ReportGenerator:

def generate(self, report\_type, data):

if report\_type == "detailed":

return f"Detailed Report: {data}"

elif report\_type == "compact":

return f"Compact Report: {data}"

else:

return "Unknown Report Type"