**Smart water fountains:**

**Phase**1**:** **PROBLEM DEFINITION AND DESIGN THINKING**

**PROJECT DEFINITION:**

The project aims to enhance public water fountains by implementing IoT sensors to control water flow and detect malfunctions. The primary objective is to provide real-time information about water fountain status to residents through a public platform. This project includes defining objectives, designing the IoT sensor system, developing the water fountain status platform, and integrating them using IoT technology and Python.

**Design Thinking:**

**Project Objectives**: Define objectives such as real-time water fountain monitoring, efficient water usage, malfunction detection, and resident awareness.

**IoT Sensor Design**: Plan the deployment of IoT sensors (e.g., flow rate sensors, pressure sensors) in public water fountains.

**Real-Time Transit Information Platform**: Design a mobile app interface that displays real-time parking availability to users.

**Integration Approach**:Determine how IoT sensors will send data to the water fountain status platform.

**CONCLUSION:** This conclusion includes defining objectives, designing the IoT sensor system, developing the water fountain status platform, and integrating them using IoT technology and Python.