## Washing Machine Simulation in C++



Name: Rushikesh Tushar Patil Department: Cyber Security

**PRN:** 2124UCSM1037

## **Project Overview**

#### **Objective:**

- Simulate basic washing machine operations.
- Implement Object-Oriented Programming (OOP) concepts.

#### **Key Functions:**

- Wash, rinse, spin cycles.
- Console-based user interaction.

# **Tools & Concepts**

### **Programming Language:**

• C++

#### **Key Concepts:**

- OOP (classes, inheritance, encapsulation)
- Input validation and error handling
- Real-time cycle simulation (timers)



## Methodology

#### Class Structure:

Washing machine class with attributes like water level, mode, timer.

#### **Cycle Control:**

Manage washing, rinsing, spinning stages.

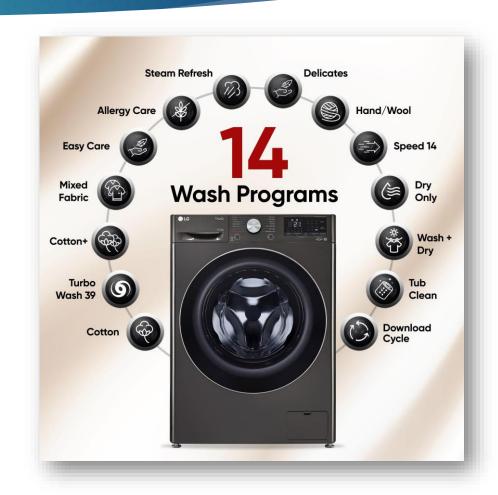
#### **Error Handling:**

Ensure robust input validation.

## Results

#### Simulation Achievements:

- Functional washing machine model.
- Successful user interaction via the console.
- Real-time simulation of operations.



## Conclusion

#### Learnings:

- OOP implementation in C++.
- Simulating real-world systems in software.

#### Future Scope:

• Expand features (drying, smart controls).



# Thank you!!