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| **OOP Lab 1** | | | |
| **Course Code:** | COMP-102L | **Class** | CS (B) |
| **Lab Engineer** | Laiba Khalid | **Semester** | 2nd |
| **Lab Title** | C++ Operations | **Section** | - |
| **Name** | Sarmad Durrani | **Reg no.** | B24F0305CS001 |
| **Content Covered** | Operations Implementation. | | |
| **Instructions:**  • Submit the file with your names following your registration numbers like AI001\_Name.  • Submit soft copy of the report before deadline. Marks will be deducted for late submissions. | | | |

**Lab Tasks:**

1. Create a base class Person with name and age attributes. Create a derived class Student that adds a grade attribute. Implement a function to display details.

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2. Create a Device class with brand. Create a TouchScreen class with touchType. Create Smartphone that inherits both.

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3. Create a Shape class with a draw() method. Create Rectangle derived from Shape with length and width attributes. Create ColoredRectangle derived from Rectangle that adds color.

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A company wants to create an Employee Management System where different types of employees share common attributes but also have their unique characteristics.

· Create a base class Employee that contains common attributes like name and salary. Then, we create derived classes Manager and Developer that inherit from Employee but add additional features.

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