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| **Object Oriented Programming Lab 03** | | | |
| **Course Code:** | COMP-112L | **Class** | CS (B) |
| **Lab Engineer** | Laiba Khalid | **Semester** | 2nd |
| **Lab Title** | C++ Classes | **Section** | - |
| **Name** |  | **Reg no.** |  |
| **Content Covered** | C++ Class 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. Write a C++ program to create a Car class with attributes like brand and year. Use a **constructor** to initialize them and a **destructor** to print a message when an object is destroyed.
2. Write a C++ program to create a Rectangle class with **two constructors** – one default (sets values automatically) and one parameterized (takes user-defined values). Calculate and display the area of rectangles created using both constructors.
3. Define a **Person** class where name is allocated dynamically in the constructor. Implement a **copy constructor** for deep copying and ensure proper memory deallocation in the destructor.
4. Write c++ code to create a **BankAccount** class with account number and balance.

* A **default constructor** sets balance = 0.
* A **parameterized constructor** takes an initial balance.
* Create objects using both constructors and display details