

1) Write a C++ program.

- Create a base class **BankAccount** with **attributes** *accountHolder* and *balance*. Implement both a **default constructor** (setting *accountHolder* to "Unknown" and *balance* to 0) and a **parameterized constructor** (accepting values for both attributes).
- Create a derived class **SavingsAccount** that inherits from **BankAccount** and adds an *interestRate* attribute.
- Implement a method in *SavingsAccount* to apply interest to the *balance* and display the account details both before and after interest is applied.

2) Write a c++ program to design a base class **person** with **attributes** (name,add,phone) and methods setname,setadd,setphone and display derive a class **Employee** from person **attribute** eno and **method** seteno and display. derive a class **manager** from employee that attributes (dept_name, salary) and method(setdept_name ,set salary,getsalary)and display

write a program to

1. get 2 objects of managers and compare their salaries
2. Display manager with highest salary

3) Write a C++ program that demonstrates multiple inheritance. Create two base classes, **Vehicle** (with a brand attribute and a method setBrand()) and **Engine** (with a horsepower attribute and a method setHorsepower()). Then, derive a **class Car** from both Vehicle and Engine, and implement a method displayCarDetails() to display the car's brand and horsepower.