| 1. | Suppose you have a Piggie Bank with an initial amount of $50 and you have to add some more amount to it. Create a class 'AddAmount' with a data member named 'amount' with an initial value of $50. Now make two other derived class as follows:  Base class - no amount will be added to the Piggie Bank  Derived class - having a parameter which is the amount that will be added to the Piggie Bank Create an object of the 'AddAmount' class and display the final amount in the Piggie Bank. |
| --- | --- |
| Sample Input | Enter the amount : 100 |
| Sample Output | Total Amount is = 150 |
| Test Case | 1. 700 |
| 2. 150.60 |
| 3. 1234 |
| 4.0000.000 |
| 5.one hundred |

| 2. | Write a program to calculate the bonus of the employees. The class master derives the information from both admin and account classes which derives information from the class person. Create base and all derived classes having same member functions and different parameters called getdata, display data and bonus. Create a base class pointer that is capable of accessing data of any class and calculates the bonus of the specified employee. |
| --- | --- |
| Sample Input | enter the salary=15000 |
| Sample Output | Bonus = 15300 |
| Test Case | 1. 50000 |
| 2.7500.00 |
| 3.one thousand |
| 4.123#$ |
| 5.FIVE |

| 3. | Write a C++ program to calculate the gross and net pay of employees from basic salary. Create an employee which consists of employee name,emp\_id, and basic salary as its data members. Use parameterized constructions in the derived class to initialize data members of the base class and calculate gross and net pay of the employee in the derived class. |
| --- | --- |
| Sample Input | Enter employee name : Mohan  Enter Employee id : A101  Enter Employee Salary : 100000 |
| Sample Output | Gross salary : 170000  Ded : 50000  Net salary = 120000 |
| Test Case |  |
|  |
|  |
|  |
|  |

| 4 | Write a C++ program to demonstrate the multiple inheritance by creating a class cuboid which extends class rectangle, class shape. It calculates area and volume. |
| --- | --- |
| Sample Input | Length : 10  breath : 10 |
| Sample Output | area of rectangle 100 |
| Test Case | 1. 50, 40 |
| 2.-5, 10 |
| 3.6, 0.6 |
| 4. FIVE, 6 |
| 5. 87.65, 34.5 |

| 5 | Write Down The Code For Following Diagram Using Inheritance |
| --- | --- |
| Sample Input | Enter the principal Amount : 10000  Enter the No. of years : 5  Enter the rate of Interest : 10% |
| Sample Output | Simple Interest : 5000 |
| Test Case | 1. 20000, 5, 12% |
| 2. 12345.66, 5,10% |
| 3. 123%^%,3,21% |
| 4. 0,0,0% |
| 5. 100,100,100% |