

1. Write a program on method overriding on Inheritance to display the name of the city.

Steps:

1. Create a new project, select console application from the template and name the project as “**InheritanceOverride.cs**”.
 2. Create a class as “CityBaseClass” and “CityDerivedClass” .
 3. Allow the derived class to override a method of the base class using virtual methods or Abstract methods.
 4. Create the instance of the “CityDerivedClass” class in the main class, access the methods and print the values.
2. Write a program for creating a Car class with in Engine, **Tyre, Sound System** properties a base class. Your program should inherit all the functionality and gives custom color to a car using interface.
 3. Write a program to display the Employee details using collections.

This is a console application to print the employee details using collections.

Steps:

1. Create a new console application project named CollectionDemoConApp.
 2. The Employee Class should contain the Id, Name, Age, Salary and Gender properties.
 3. In the main class, write the code to
Add 5 Employee records using a **dictionary** and Print all of them
4. Write a program to display output as below pattern
*

*

5. Write a program to count a total number of vowel or consonant in a string.
 6. Write a program in C# Sharp to count the total number of words in a string.

7. Write a program to search for an item in a `Stack<T>`. (Using Generic Collection)
8. Write a program to create a function to calculate the sum of the individual digits of a given number.
9. Write a program to check whether a number is a palindrome or not.
10. Write a program to print the Binary equivalent of an integer using recursion.
11. Create a project named "Tables2", based on the "Tables" project. In it, create a class "CoffeeTable" that inherits from "Table". Its method "ShowData", besides writing the width and height, must display "(Coffee table)."
Create an array that contains 5 tables and 5 coffee tables. The tables must have random sizes between 50 and 200 cm, and the coffee tables from 40 to 120 cm. Show all their data.