Lesson 7:

Using the C# Programming Guide as your reference: <https://msdn.microsoft.com/en--us/library/67ef8sbd.aspx> Create a set of classes that satisfy this program:

using System;

using System.Collections.Generic;

public class FarmAnimal {

public virtual void MakeNoise() {

Console.WriteLine("Insert farm animal noise");

}

public virtual void Eat(){

Console.WriteLine("Begins eating..");

}

}

// Pig subclass

public class Pig : FarmAnimal {

public void Oink() {

Console.WriteLine("Oink");

}

public override void MakeNoise() {

Oink();

}

public override void Eat() {

Console.WriteLine("The pigs are eating!");

Console.WriteLine("Anything but bacon!");

}

}

// Cow subclass

public class Cow : FarmAnimal {

public void Moo() {

Console.WriteLine("Moo");

}

public override void MakeNoise() {

Moo();

}

public override void Eat() {

Console.WriteLine("The cows are eating!");

Console.WriteLine("No Cheeseburgers though...");

}

}

class Program {

public static void Main() {

Pig pig = new Pig();

Cow cow = new Cow();

pig.Oink();

cow.Moo();

List<FarmAnimal> animals = new List<FarmAnimal>();

animals.Add(pig);

animals.Add(cow);

animals.ForEach(delegate(FarmAnimal a) {

a.Eat();

a.MakeNoise();

});

}

}

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Lesson 8:

In Ruby, define a module and base class that these two classes can include to describe common data and functionality for the classes:

module VehicleModel

def initialize(make, model)

@make = make

@model = model

end

def start\_engine

puts "Starting the engine of #{@make} #{@model}"

end

def honk\_horn

puts "Honk! Honk!"

end

def stop\_engine

puts "The engine has stopped for the #{@make} #{@model}"

end

end

class VehicleType

include VehicleModel

end

class Car < VehicleType

end

class Truck < VehicleType

def honk\_horn

puts "HONK! HONK!"

end

end

car = Car.new("Chevy", "Cruze")

car.start\_engine

car.honk\_horn

truck = Truck.new("Ford", "F-250")

truck.start\_engine

truck.honk\_horn

car.stop\_engine

truck.stop\_engine

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