**-----------Constants-------------**

public enum AnimalType

{

Harvivore,

carnivore,

Omnivore

}

**---------------Animal---------**

public string Name { get; set; }

public int Age { get; set; }

public AnimalType Type { get; set; }

**----------- IGenericAnimal-----------------**

public interface IGenericAnimal<T>

{

string GetGenericAnimal(T obj);

}

**----------------- GenericAnimal-------------**

public class GenericAnimal<T> : IGenericAnimal<T>

{

public string GetGenericAnimal(T obj)

{

string behavior = string.Empty;

if (obj is Animal)

{

Animal a = obj as Animal;

switch (a.Type)

{

case AnimalType.Harvivore:

behavior = "The Animal Eats Grass";

break;

case AnimalType.carnivore:

behavior = "The Animal Eats Meat";

break;

case AnimalType.Omnivore:

behavior = "The Animal Eats EveryThing";

break;

default:

behavior = "unknown behavior";

break;

}

}

else { behavior = "Not an animal"; }

return behavior;

}

}

**------------- Program----------------**

class Program

{

static void Main(string[] args)

{

Animal cow = new Animal { Name = "cow", Age = 2, Type = AnimalType.carnivore };

GenericAnimal<Animal> animal = new GenericAnimal<Animal>();

Console.WriteLine(animal.GetGenericAnimal(cow));

Console.ReadKey();

}

}