```csharp
1  using System;
2
3  namespace Zoo
4  {
5      abstract class Animal
6      {
7          protected string Name;
8          protected int Weight;
9
10         public Animal(string n, int w) {
11             this.Name = n;
12             this.Weight = w;
13         }
14
15         public abstract void Eat(int food);//추상 메소드
16
17         public virtual void Info() {
18             Console.WriteLine($"{this.Name} : {this.Weight} gram");
19         }
20
21     }
22
23     class Dog : Animal
24     {
25         public Dog(string n, int w) : base(n, w) {
26         }
27
28         public void Bark() {
29             Console.WriteLine($"{Name}:멍멍");
30         }
31
32         public override void Info() {
33             Console.Write("[개]");
34             base.Info();
35         }
36
37         public override void Eat(int food) {
38             this.Weight += food * 2;
39         }
40     }
41
42     class Cat : Animal
43     {
44         public Cat(string n, int w) : base(n, w) {
45
46         }
47
48         public void Meow() {
49             Console.WriteLine($"{Name}:야옹");
50         }
51
52         public new void Info() {
53             Console.Write("[냥]");
54             base.Info();
55         }
56
```

```
57          public override void Eat(int food) {
58              this.Weight += food / 2;
59          }
60      }
61
62      class Program
63      {
64          static void Main(string[] args) {
65              //Animal ani = new Animal("동물", 100);
66              Dog d1 = new Dog("개", 150);
67              Dog d2 = new Dog("해피", 1200);
68              Cat c1 = new Cat("네로", 800);
69
70              d1.Eat(10); //150+(10*2) = 170
71              d2.Eat(20); //1200 + (20*2) = 1240
72              c1.Eat(10); // 800 + (10/2) = 805;
73
74              d2.Eat(30); //1240 + (30*2) = 1300
75
76              d1.Info();
77              d2.Info();
78              c1.Info();
79              Console.WriteLine("------------------------");
80              Animal a1 = (Animal) d1;
81              Animal a2 = (Animal) c1;
82              a1.Info();//dog
83              a2.Info();//c1
84
85
86          }
87      }
88  }
89
```