

```
1 namespace Animals_6._2P
2 {
3     public class TestAnimal
4     {
5         public static void Main(String[] args)
6         {
7             // Using the subclasses
8             Cat cat1 = new Cat();
9             cat1.Greeting(); // Fixed method name
10            Dog dog1 = new Dog();
11            dog1.Greeting(); // Fixed method name
12            BigDog bigDog1 = new BigDog();
13            bigDog1.Greeting(); // Fixed method name
14
15            // Using Polymorphism
16            Animal animal1 = new Cat();
17            animal1.Greeting(); // Fixed method name
18            Animal animal2 = new Dog();
19            animal2.Greeting(); // Fixed method name
20            Animal animal3 = new BigDog();
21            animal3.Greeting(); // Fixed method name
22            // Animal animal4 = new Animal(); // Cannot instantiate abstract class
23
24            /* ^^^^^^^
25             * These lines demonstrate polymorphism because animal1,
26             * animal2, and animal3
27             * are all of type Animal, but they execute the overridden
28             * Greeting methods
29             * of their respective actual types.
30             */
31
32            // Downcast
33            Dog dog2 = (Dog)animal2;
34            BigDog bigDog2 = (BigDog)animal3;
35            Dog dog3 = (Dog)animal3;
36            // Cat cat2 = (Cat)animal2; // Invalid cast, commented out
37            dog2.Greeting(dog3);
38            dog3.Greeting(dog2);
39            dog2.Greeting(bigDog2);
40            bigDog2.Greeting(dog2);
41            bigDog2.Greeting(bigDog1);
42        }
43    }
```