Abstruction IT-22020

```
interface Sound{
        void makeSound();
    }

abstract class Animal{
        String name;

    public Animal(String name){
        this.name = name;
    }

    abstract void move();

        public void showName(){
            System.out.println("Animal Name:" + name);
        }}

class Dog extends Animal implements Sound{
        public Dog(String name){
            super(name);
        }
```

```
    public void makeSound(){
      System.out.println("Dog says: woof!");
    }
  void move(){
     System.out.println("Dog runs.");
  }}
}
class cat extends Animal implements Sound{
    public Cat(String name){
        super(name);
    }
  public void makeSound(){
     System.out.println("cat says: Meow!");
  }
  void move(){
     system.out.println("cat walks gracefully
     }
}
```

```
public class abstraction{
    public static void main (String[] args){
    Animal dog =new Dog("Buddy");
      dog.showname();
    ((Sound)dog).makeSound();
      dog.move();
    System.out.println();
Animal cat = new Cat("Whiskers");
    cat.showName();
((Sound)cat).makeSound();
    cat.move();
}}
}}
```