

Aim:

Write a Java program that implements **runtime polymorphism**.

Create a class `Animal` with one method `whoAmI()` which will print **I am a generic animal**.

Create another class `Dog` which extends `Animal`, which will print **I am a dog**.

Create another class `Cow` which extends `Animal`, which will print **I am a cow**.

Create another class `Snake` which extends `Animal`, which will print **I am a snake**.

Write a class `RuntimePolymorphismDemo` with the **main()** method, create objects to all the classes `Animal`, `Dog`, `Cow`, `Snake` and call `whoAmI()` with each object.

Note: Please don't change the package name.

Source Code:

`q11277/RuntimePolymorphismDemo.java`

```
package q11277;
public class RuntimePolymorphismDemo {
    public static void main(String[] args) {
        Animal ref1 = new Animal();
        Animal ref2 = new Dog();
        Animal ref3 = new Cow();
        Animal ref4 = new Snake();
        ref1.whoAmI();
        ref2.whoAmI();
        ref3.whoAmI();
        ref4.whoAmI();
    }
}

// Write all the classes with methods
class Animal
{
    void whoAmI()
    {
        System.out.println("I am a generic animal");
    }
}
class Dog extends Animal
{
    void whoAmI()
    {
        System.out.println("I am a dog");
    }
}
class Cow extends Animal
{
    void whoAmI()
    {
```

```
        System.out.println("I am a cow");
    }
}
class Snake extends Animal
{
    void whoAmI()
    {
        System.out.println("I am a snake");
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
I am a generic animal
I am a dog
I am a cow
I am a snake