**Exercise 2: Implementing the Factory Method Pattern**

**Goal**: Create objects without specifying the exact class of object to be created.

**Program:**

interface Product {

void display();

}

class Book implements Product {

public void display() {

System.out.println("This is a Book.");

}

}

class Electronics implements Product {

public void display() {

System.out.println("This is an Electronic item.");

}

}

class ProductFactory {

public static Product getProduct(String type) {

if (type.equalsIgnoreCase("book"))

return new Book();

else if (type.equalsIgnoreCase("electronics"))

return new Electronics();

return null;

}

}

public class Main {

public static void main(String[] args) {

Product product1 = ProductFactory.getProduct("book");

product1.display();

Product product2 = ProductFactory.getProduct("electronics");

product2.display();

}

}

**Output:**

This is a Book.

This is an Electronic item.