```
import factorial.Factorial;
import org.junit.jupiter.api.Assertions;
import org.junit.jupiter.api.Test;
public class FactorialTest {
   @Test
    public void testFactorialBucle() throws Exception {
        Factorial factorial = new Factorial();
        int resultado = factorial.factorial_bucle(5);
        Assertions.assertEquals(120, resultado);
   @Test
    public void testFactorialBucleNumeroNegativo() {
        Factorial factorial = new Factorial();
        Assertions.assertThrows(Exception.class, () -> factorial.factorial_bucle(-2));
   @Test
    public void testFactorialRecursivo() throws Exception {
        Factorial factorial = new Factorial();
        int resultado = factorial.factorial_recursivo(5);
       Assertions.assertEquals(120, resultado);
   @Test
    public void testFactorialRecursivoNumeroNegativo() {
        Factorial factorial = new Factorial();
        Assertions.assertThrows(Exception.class, () -> factorial.factorial_recursivo(-2));
```