

# **JUnit Cheat Sheet**

### **Simple Test**

```
class UserTests {
    @Test
    void isAdult_AgeLessThan18_False() {
        User paul = new User(17);
        assertFalse(paul.isAdult());
    }
}
```

### **Basic Assertions**

```
assertTrue(condition);
assertFalse(condition);
assertEquals(expected, actual);  // Equal
assertNotEquals(expected, actual);  // Not equal
assertArrayEquals(expected, actual);  // Arrays are equal
assertSame(expected, actual);  // Same object
assertNotSame(expected, actual);  // Not the same object
```

## **Exception Assertions**

```
assertThrows(expectedType, executable);
assertDoesNotThrow(executable);

@Test

void crash_Normal_ShouldThrow() {
    Car car = new Car();
    assertThrows(CrashException.class, () -> car.crash());
}
```



#### **Test Fixture**

```
class UserTests {
    @BeforeAll
    static void initAll() { // runs ones before all tests }

    @BeforeEach
    void init() { // runs before each test }

    @AfterEach
    void tearDown() { // runs after each test }

    @AfterAll
    static void tearDownAll() { // runs ones after all tests }

    User myUser = new User(16);

    @Test
    void isAdult_AgeLessThan18_False() {
        assertFalse(myUser.isAdult());
    }
}
```

### **Value Parameterized Tests**

```
class UserTests {
    @ParameterizedTest
    @ValueSource(ints = { 18, 20, 60 })
    void isAdult_AgeGreaterThan18_True(int age) {
        User user = new User(age);
        assertTrue(user.isAdult());
    }
}
```