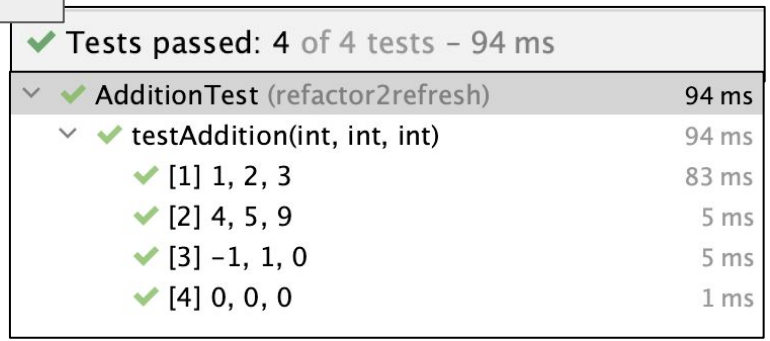
```java
@ParameterizedTest
@CsvSource({
        "1, 2, 3",
        "4, 5, 9",
        "-1, 1, 0",
        "0, 0, 0"
})
void testAddition(int a, int b, int expectedSum) {
    assertEquals(expectedSum, add(a, b));
}
```

This was to provide basic information at start



Style 1

```
@Test public void getByName() {
    assertEquals( expected: "»", Entities.getByName("nGt"));
    assertEquals( expected: "fj", Entities.getByName("fjlig"));
    assertEquals( expected: "»", Entities.getByName("gg"));
    assertEquals( expected: "©", Entities.getByName("copy"));
}
```

Legend

Represents structurally similar lines/blocks

Style 2

```
@ParameterizedTest
@CsvSource(value = {
        "»| nGt",
        "fj, fjlig",
        "», gg",
        "©, copy"
})
public void getByName(String expected, String name) {
    assertEquals(expected, Entities.getByName(name));
}
```

In this Style 2 is our refactored test

Style 1

```
@ParameterizedTest
@CsvSource(value = {
        "38, amp",
        "62, gt",
        "60, lt",
        "34, quot"
})
public void xhtmlCodepointForName(int expectedCodepoint, String name) {
    assertEquals(expectedCodepoint, xhtml.codepointForName(name));
}
@ParameterizedTest
@CsvSource(value = {
        "amp, 38",
        "gt, 62",
        "lt, 60",
        "quot, 34"
})
public void xhtmlNameForCodepoint(String expectedName, int codepoint) {
    assertEquals(expectedName, xhtml.nameForCodepoint(codepoint));
}
```

Style 2

```
@Test
public void xhtml() {
    assertEquals( expected: 38, xhtml.codepointForName("amp"));
    assertEquals( expected: 62, xhtml.codepointForName("gt"));
    assertEquals( expected: 60, xhtml.codepointForName("lt"));
    assertEquals( expected: 34, xhtml.codepointForName("quot"));

    assertEquals( expected: "amp", xhtml.nameForCodepoint(38));
    assertEquals( expected: "gt", xhtml.nameForCodepoint(62));
    assertEquals( expected: "lt", xhtml.nameForCodepoint(60));
    assertEquals( expected: "quot", xhtml.nameForCodepoint(34));
}
```

Legend

Represents structurally similar lines/blocks

Represents another type of structurally similar lines/blocks

In this Style 1 is our refactored test

Style 1

```
static Stream<Object[]> memorySizeProvider() {
  return Stream.of(
          new Object[]{MemorySize.ZERO, 0, 0, 0, 0, 0},
          new Object[]{new MemorySize( bytes: 955), 955, 0, 0, 0, 0},
          new Object[]{new MemorySize( bytes: 18500), 18500, 18, 0, 0, 0},
          new Object[]{new MemorySize( bytes: 15 * 1024 * 1024), 15_728_640, 15_360, 15, 0, 0},
          new Object[]{new MemorySize( bytes: 2L * 1024 * 1024 * 1024 * 1024 + 10), 2199023255562L,
                  2147483648L, 2097152, 2048, 2}
  );
}

no usages   new *
@ParameterizedTest
@MethodSource("memorySizeProvider")
void testUnitConversion(MemorySize memorySize, long expectedBytes, long expectedKibiBytes,
                        long expectedMebiBytes, long expectedGibiBytes, long expectedTebiBytes) {
  assertEquals(expectedBytes, memorySize.getBytes());
  assertEquals(expectedKibiBytes, memorySize.getKibiBytes());
  assertEquals(expectedMebiBytes, memorySize.getMebiBytes());
  assertEquals(expectedGibiBytes, memorySize.getGibiBytes());
  assertEquals(expectedTebiBytes, memorySize.getTebiBytes());
}
```

Legend

Represents structurally similar lines/blocks

In this Style 1 is our refactored test

Style 2

```
@Test
public void testUnitConversion() {
  final MemorySize zero = MemorySize.ZERO;
  assertEquals( expected: 0, zero.getBytes());
  assertEquals( expected: 0, zero.getKibiBytes());
  assertEquals( expected: 0, zero.getMebiBytes());
  assertEquals( expected: 0, zero.getGibiBytes());
  assertEquals( expected: 0, zero.getTebiBytes());

  final MemorySize bytes = new MemorySize( bytes: 955);
  assertEquals( expected: 955, bytes.getBytes());
  assertEquals( expected: 0, bytes.getKibiBytes());
  assertEquals( expected: 0, bytes.getMebiBytes());
  assertEquals( expected: 0, bytes.getGibiBytes());
  assertEquals( expected: 0, bytes.getTebiBytes());

  final MemorySize kilos = new MemorySize( bytes: 18500);
  assertEquals( expected: 18500, kilos.getBytes());
  assertEquals( expected: 18, kilos.getKibiBytes());
  assertEquals( expected: 0, kilos.getMebiBytes());
  assertEquals( expected: 0, kilos.getGibiBytes());
  assertEquals( expected: 0, kilos.getTebiBytes());

  final MemorySize megas = new MemorySize( bytes: 15 * 1024 * 1024);
  assertEquals( expected: 15_728_640, megas.getBytes());
  assertEquals( expected: 15_360, megas.getKibiBytes());
  assertEquals( expected: 15, megas.getMebiBytes());
  assertEquals( expected: 0, megas.getGibiBytes());
  assertEquals( expected: 0, megas.getTebiBytes());

  final MemorySize teras = new MemorySize( bytes: 2L * 1024 * 1024 * 1024 * 1024 + 10);
  assertEquals( expected: 2199023255562L, teras.getBytes());
  assertEquals( expected: 2147483648L, teras.getKibiBytes());
  assertEquals( expected: 2097152, teras.getMebiBytes());
  assertEquals( expected: 2048, teras.getGibiBytes());
  assertEquals( expected: 2, teras.getTebiBytes());
}
```

Style 1

```
@Test
public void testHashCode() {
    final TextStringBuilder sb = new TextStringBuilder( initialCapacity: 10);
    final int hc1a = sb.hashCode();
    final int hc1b = sb.hashCode();
    Assertions.assertEquals(hc1a, hc1b);

    final int emptyHc = Arrays.hashCode(sb.getChars(new char[0]));
    assertNotEquals(emptyHc, hc1a);

    final TextStringBuilder sb2 = new TextStringBuilder( initialCapacity: 8000);
    final int h1a = sb2.hashCode();
    final int h1b = sb2.hashCode();
    Assertions.assertEquals(h1a, h1b);

    sb2.append("abc");
    final int hc2b2 = sb2.hashCode();
    final int hc3b2 = sb2.hashCode();
    Assertions.assertEquals(hc2b2, hc3b2);
}
```

Legend

- Represents structurally similar lines/blocks
- Represents another type of structurally similar lines/blocks

Style 2

```
@Test
public void testHashCodeAndEmptyCondition() {
    final TextStringBuilder sb = new TextStringBuilder( initialCapacity: 10);
    final int hc1a = sb.hashCode();
    final int hc1b = sb.hashCode();
    Assertions.assertEquals(hc1a, hc1b);

    final int emptyHc = Arrays.hashCode(sb.getChars(new char[0]));
    assertNotEquals(emptyHc, hc1a);
}

no usages   new *
@Test
public void testHashCodeWithAppend() {
    final TextStringBuilder sb2 = new TextStringBuilder( initialCapacity: 8000);
    final int h1a = sb2.hashCode();
    final int h1b = sb2.hashCode();
    Assertions.assertEquals(h1a, h1b);

    sb2.append("abc");
    final int hc2b2 = sb2.hashCode();
    final int hc3b2 = sb2.hashCode();
    Assertions.assertEquals(hc2b2, hc3b2);
}
```

In this Style 2 is our refactored test

Style 1

```java
@Test
public void testHashCode() {
    final TextStringBuilder sb = new TextStringBuilder( initialCapacity: 10);
    final int hc1a = sb.hashCode();
    final int hc1b = sb.hashCode();
    Assertions.assertEquals(hc1a, hc1b);

    sb.append("abc");
    final int hc1b1 = sb.hashCode();
    final int hc1b2 = sb.hashCode();
    Assertions.assertEquals(hc1b1, hc1b2);

    final TextStringBuilder sb2 = new TextStringBuilder( initialCapacity: 2000);
    final int h1a = sb2.hashCode();
    final int h1b = sb2.hashCode();
    Assertions.assertEquals(h1a, h1b);

    sb2.append("123");
    final int hc2b2 = sb2.hashCode();
    final int hc3b2 = sb2.hashCode();
    Assertions.assertEquals(hc2b2, hc3b2);
}
```

Style 2

```java
@ParameterizedTest
@CsvSource({
        "10, 'abc'",
        "2000, '123'"
})
public void testHashCode(int capacity, String appendValue) {
    final TextStringBuilder sb = new TextStringBuilder(capacity);
    final int hcBefore = sb.hashCode();
    final int hcBeforeDuplicate = sb.hashCode();
    Assertions.assertEquals(hcBefore, hcBeforeDuplicate);

    sb.append(appendValue);
    final int hcAfter = sb.hashCode();
    final int hcAfterDuplicate = sb.hashCode();
    Assertions.assertEquals(hcAfter, hcAfterDuplicate);
}
```

Legend

Represents structurally similar lines/blocks

In this Style 2 is our refactored test

Style 1

```java
@Test
public void testHashCode() {
    final TextStringBuilder sb = new TextStringBuilder( initialCapacity: 10);
    final int hc1a = sb.hashCode();
    final int hc1b = sb.hashCode();
    Assertions.assertEquals(hc1a, hc1b);

    sb.append("abc");
    final int hc1b1 = sb.hashCode();
    final int hc1b2 = sb.hashCode();
    Assertions.assertEquals(hc1b1, hc1b2);

    final TextStringBuilder sb2 = new TextStringBuilder( initialCapacity: 2000);
    final int h1a = sb2.hashCode();
    final int h1b = sb2.hashCode();
    Assertions.assertEquals(h1a, h1b);

    sb2.append("123");
    final int hc2b2 = sb2.hashCode();
    final int hc3b2 = sb2.hashCode();
    Assertions.assertEquals(hc2b2, hc3b2);
}
```

Legend

- Represents structurally similar lines/blocks
- Represents another type of structurally similar lines/blocks

In this Style 2 is our refactored test

Style 2

```java
@ParameterizedTest
@CsvSource({
        "10",
        "2000"
})
public void testHashCode(int capacity) {
    final TextStringBuilder sb = new TextStringBuilder(capacity);
    final int hcBefore = sb.hashCode();
    final int hcBeforeDuplicate = sb.hashCode();
    Assertions.assertEquals(hcBefore, hcBeforeDuplicate);
}

no usages  new *
@ParameterizedTest
@CsvSource({
        "10, 'abc'",
        "2000, '123'"
})
public void testHashCodeAppendValue(int capacity, String appendValue) {
    final TextStringBuilder sb = new TextStringBuilder(capacity);

    sb.append(appendValue);
    final int hcAfter = sb.hashCode();
    final int hcAfterDuplicate = sb.hashCode();
    Assertions.assertEquals(hcAfter, hcAfterDuplicate);
}
```