

Explanation A

The method *convert(src, toType)* converts an object *src* to a specified type *toType*. The assertion in line 4 checks if the method outputs the same value as the input variable *src*.

Internally, the method computes and returns the value of the variable *result* based on its *src* parameter,
However,

1. In V1, the method first checks if *src* is not *null* and is assignable to the target type *toType*. Since this condition evaluates to *true*, *src* is returned directly.
2. In V2, this condition check and the direct return of *src* have been removed. Instead, *result* is computed as a function of *src* and then returned.

In summary, removing code that returns the value of the input *src* variable directly (line 8 in V1) and rather returning a computed value (line 14 in V2) causes the returned value in V2 to differ from the value of the input variable *src*, leading to the assertion failure in line 4.

Explanation B

The method *convert(src, toType)* converts an object *src* to a specified type *toType*. The assertion in line 4 checks if the method outputs the same value as the input variable *src*.

Internally, the method computes and returns the value of the variable *result* based on its *src* parameter,
However,

1. In V1, the method first checks if *src* is not *null* and is assignable to the target type *toType*. Since this condition evaluates to *true*, *src* is returned directly.
2. In V2, this condition check and the direct return of *src* have been removed. Instead, a new *TokenBuffer* is created, and *src* is serialized into this buffer. The buffer is then used to create a *JsonParser*, which, combined with a configuration object obtained from the serialization step, is used to deserialize *src* into *result*. Finally, the deserialized object is returned.

In summary, removing code that returns the value of the input *src* variable directly (line 8 in V1) and rather returning a computed value (line 14 in V2) causes the returned value in V2 to differ from the value of the input variable *src*, leading to the assertion failure in line 4.

Explanation C

The method *convert(src, toType)* converts an object *src* to a specified type *toType*. The assertion in line 4 checks if the method outputs the same value as the input variable *src*,
which is initialized in line 2 to be an instance of *TestObject*.
The desired conversion type is initialized in line 3 to be *TestObject* as well.

Internally, the method computes and returns the value of the variable *result* based on its *src* parameter,
However,

1. In V1, the method first checks if *src* is not *null* and is assignable to the target type *toType*. Since this condition evaluates to *true*, *src* is returned directly.
2. In V2, this condition check and the direct return of *src* have been removed. Instead, *result* is computed as a function of *src* and then returned.

In summary, removing code that returns the value of the input *src* variable directly (line 8 in V1) and rather returning a computed value (line 14 in V2) causes the returned value in V2 to differ from the value of the input variable *src*, leading to the assertion failure in line 4.

Notations: Colored backgrounds highlight the differences between the views.

FYI: Views are given below again, for your reference.

View A

V1		V2	
1	public static void main(String[] args){	1	public static void main(String[] args){
2		2	
3		3	
4	✔ assertSame(src, convert(src, toType));	4	✘ assertSame(src, convert(src, toType));
5	}	5	}
6	public <T> T convert(object src, Class<T> toType){	6	public <T> T convert(object src, Class<T> toType){
7	if (src!=null && isAssignable(src, toType)) [true]	7	
8	return src;	8	
9		9	
10		10	
11		11	
12		12	
13	result = Func1(src);	13	result = Func1(src);
14	return (T) result;	14	return (T) result;
15	}	15	}

View B

V1		V2	
1	public static void main(String[] args){	1	public static void main(String[] args){
2		2	
3		3	
4	✔ assertSame(src, convert(src, toType));	4	✘ assertSame(src, convert(src, toType));
5	}	5	}
6	public <T> T convert(object src, Class<T> toType){	6	public <T> T convert(object src, Class<T> toType){
7	if (src!=null && isAssignable(src, toType)) [true]	7	
8	return src;	8	
9	Object result;	9	Object result;
10	TokenBuffer buf = new TokenBuffer();	10	TokenBuffer buf = new TokenBuffer();
11	Config config = serializeValue(buf, src);	11	Config config = serializeValue(buf, src);
12	JsonParser p = buf.asParser();	12	JsonParser p = buf.asParser();
13	result = deserialize(p, config);	13	result = deserialize(p, config);
14	return (T) result;	14	return (T) result;
15	}	15	}

View C

V1		V2	
1	public static void main(String[] args){	1	public static void main(String[] args){
2	TestObject src = new TestObject();	2	TestObject src = new TestObject();
3	Class toType = src.getClass();	3	Class toType = src.getClass();
4	✔ assertSame(src, convert(src, toType));	4	✘ assertSame(src, convert(src, toType));
5	}	5	}
6	public <T> T convert(object src, Class<T> toType){	6	public <T> T convert(object src, Class<T> toType){
7	if (src!=null && isAssignable(src, toType)) [true]	7	
8	return src;	8	
9		9	
10		10	
11		11	
12		12	
13	result = Func1(src);	13	result = Func1(src);
14	return (T) result;	14	return (T) result;
15	}	15	}