#### NOTE: SCENARIO IS WHAT PUZZLE TAKER SEES.

## **SCENARIO:**

See the <u>J23-Cipher.getOutputSize</u> puzzle.

```
01
    // OMITTED: Import whatever is needed.
02
    public final class CryptoUtils {
03
       public static byte[] encrypt (String alg, Key key, String text)
04
           throws GeneralSecurityException {
05
         // Create a cipher
         Cipher cipher = Cipher.getInstance(alg);
06
07
         cipher.init(Cipher.ENCRYPT MODE, key);
80
09
         // Encrypt the data
         byte[] input = text.getBytes();
10
         byte[] output = new byte[cipher.getOutputSize(input.length)];
11
12
13
         int length = cipher.update(input, 0, input.length, output, 0);
14
         length += cipher.doFinal(output, length);
15
         return output;
16
       }
17
     }
```

## Questions:

See the <u>J23-Cipher.getOutputSize</u> puzzle.

NOTE: ANSWER IS TO BE SHOWN TO PUZZLE TAKER AT THE END OF SESSION.

## ANSWER:

d

See the <u>J23-Cipher.getOutputSize</u> puzzle.

NOTE: THE REST OF DOCUMENT CONTAINS EXTRA INFORMATION FOR THE PROJECT RESEARCHERS. IT IS NOT TO BE SHOWN TO PUZZLE TAKERS.

#### TAGS:

java, cryptography, cipher, invalid-object-initialization, api-protocol-usage, non-security-blindspot

#### **CATEGORIES:**

```
Blindspot - NO
Type - Crypto
```

Number of distinct functions - 7
Number of total functions - 7
Blindspot function - NA
Function call omitted - NA
Blindspot type - NA
Number of Parameters in the blindspot function - NA
Cyclomatic complexity - 2

## NAME:

Cipher class, getOutputSize method - Provides the functionality of a cryptographic cipher for encryption and decryption. It forms the core of the Java Cryptographic Extension (JCE) framework.

# **MORE INFORMATION:**

To see a vulnerable way of use of the API look at the <u>J23-Cipher.getOutputSize</u> puzzle.

## **REFERENCES:**

1. Cipher