

3. What does the following code do?

Show Results

19/20 Students Answered

```
File dataFile = new File("myFile.txt");
```

- A Creates a new file called "myFile.txt" on the user's disk ☒
- B Opens the file "myFile.txt" from disk for reading into the program ☒
- C Creates a Java File object which references the path "myFile.txt" ☒
- D Checks whether the file "myFile.txt" exists on the user's disk ☒

☐ No Explanation

5. What does the following code do?

Select all that apply.

Show Results

19/20 Students Answered

```
File dataFile = new File("myFile.txt");  
Scanner dataInput = new Scanner(dataFile);  
while (dataInput.hasNext()) {  
    String lineOfInput = dataInput.nextLine();  
    System.out.println(lineOfInput);  
}
```

- A Opens a file called "myFile.txt" from disk ☒
- B Creates the file "myFile.txt" if it doesn't exist ☒
- C Tells the user if the file "myFile.txt" doesn't exist ☒
- D Reads all lines from the file ☒
- E Prints each line to the user's terminal window ☒
- F Closes and unlocks the file ☒

☐ No Explanation

5. What does the following code do?

Select all that apply.

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File dataFile = new File("myFile.txt");  
Scanner dataInput = new Scanner(dataFile);  
while (dataInput.hasNext()) {  
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- A Opens a file called "myFile.txt" from disk ☒
- B Creates the file "myFile.txt" if it doesn't exist ☒
- C Tells the user if the file "myFile.txt" doesn't exist ☒
- D Reads all lines from the file ☒
- E Prints each line to the user's terminal window ☒
- F Closes and unlocks the file ☒

☐ No Explanation

Scanner dataInput = new Scanner("myFile.txt");
The File object gives us the ability to make sure
the file actually exists using methods from it.

Better practice is to
Scanner dataInput = new Scanner(new File("myFile.txt"));

File object instead of a String

6. What does the following code do?

Select all that apply.

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- A Opens a file called "myFile.txt" from disk ✓
- B Creates the file "myFile.txt" if it doesn't exist ✗
- C Tells the user if the file "myFile.txt" doesn't exist ✓
- D Reads all lines from the file ✓
- E Prints each line to the user's terminal window ✓
- F Closes and unlocks the file ✓
- I No Explanation

```
File dataFile = new File("myFile.txt");
try (Scanner dataInput = new Scanner(dataFile)) {
    while(dataInput.hasNext()) {
        String lineOfInput = dataInput.nextLine();
        System.out.println(lineOfInput);
    }
} catch (FileNotFoundException ex) {
    System.err.println("The file does not exist.");
}
```

try with resources (opens the file for reading and closes the file at the end)

```
try (Scanner dataInput = new Scanner(dataFile)) {
    if (dataInput.hasNext()) {
        String firstLine = dataInput.nextLine();
    }
}
```

7. Inspect the following code:

This code creates two Scanner objects - one to read input from the terminal, and one to read a file.

You can do this because the Scanner class defines multiple constructors: one constructor accepts an input stream (the user's terminal), and another constructor accepts a File object.

This is an example of using:

Show Results

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- A Inheritance ✗
- B Polymorphism ✓
- C Operator overloading ✗
- D Method overloading ✓
- E Method overriding ✗
- I No Explanation

```
// Create a Scanner using the InputStream "System.in"
Scanner input = new Scanner(System.in);
System.out.print("Enter a path to the file: "); // prompt the user
String filePath = input.nextLine(); // Save the user input to a variable
File dataFile = new File(filePath); // Create a File object referencing the path

// Create a Scanner using the File "dataFile"
try (Scanner dataInput = new Scanner(dataFile)) {
    // Loop, read and print out the file line-by-line
    while (dataInput.hasNext()) {
        String lineOfInput = dataInput.nextLine();
        System.out.println(lineOfInput);
    }
} catch (FileNotFoundException ex) {
    System.err.println("The file does not exist.");
}
```

7. Inspect the following code:






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This is an example of using:

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- A Inheritance 
 - B Polymorphism 
 - C Operator overloading  + sign is an example of overloading for addition OR to concatenate. Built into Java.
 - D Method overloading 
 - E Method overriding  @Override
 - i No Explanation
-