**HomeTask2**

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Question 1. What class and method would you use to read a few pieces of data that are at known positions near the end of a large file?

Based on the tutorial content with Random access file class, if you want to read a few pieces of data at known positions near the end of a large file, you can use the **SeekableByteChannel** interface along with the **position(long)** method. This method allows you to set the channel's position, enabling you to read data from a specific location in the file. Additionally, you can use the **read (ByteBuffer)** method to read bytes from the channel into a buffer.

Question 2. When invoking format, what is the best way to indicate a new line?

Based on Formatting content in tutorial in the Java programming language the **System.out.format()** method is responsible for this and to get the correct line separator for the local platform, conversion %n is used.

Question 3. How would you determine the MIME type of a file?

To determine the MIME type of a file in Java, the **probeContentType(Path)** method is recommended. However, it's important to note that this method may return **null** if the content type cannot be determined. The implementation of **probeContentType** is platform specific. we can provide a custom [FileTypeDetector](https://docs.oracle.com/javase/8/docs/api/java/nio/file/spi/FileTypeDetector.html" \t "_blank) if the default is not sufficient.

Question 4. What method(s) would you use to determine whether a file is a symbolic link?

To determine whether a Path instance is a symbolic link, you can use the [isSymbolicLink(Path)](https://docs.oracle.com/javase/8/docs/api/java/nio/file/Files.html" \l "isSymbolicLink-java.nio.file.Path-" \t "_blank) method.