10. File Encryption Filter

File encryption is the science of writing the contents of a file in a secret code. Your encryption program should work like a filter, reading the contents of one file, modifying the data into a code, and then writing the coded contents out to a second file. The second file will be a version of the first file, but written in a secret code. Although there are complex encryption techniques, you should come up with a simple one of your own. For example, you could read the first file one character at a time, and add 10 to the character code of each character before it is written to the second file. → Only write into **void main**

```
try {
        String outputContent = "MinhContent2.txt";                          // Tên file đầu ra
        FileWriter writer = new FileWriter(outputContent);                  // Tạo đối tượng FileWriter để ghi vào file
        String inputContent = "MinhContent.txt";                    // Tên file đầu vào  > tạo đối tượng để đọc file
        File inputFile = new File(inputContent);
        Scanner inputScanner = new Scanner(inputFile);              // Tạo đối tượng Scanner để đọc
        while ( inputScanner.hasNext() ) {
           String currentLine = inputScanner.nextLine() ;
           String encryption = "";                                   // Chuỗi chứa nội dung mã hoá
           for ( int i = 0 ; i < currentLine.length() ; i++  ) {                  // Mã hoá
              encryption += (char) (currentLine.charAt(i) + 10) ;
           }
           writer.write(encryption + System.lineSeparator());                          // Chuyển vào file đầu ra
        }
        inputScanner.close();
        writer.close();
    } catch (IOException a) {
        System.out.println( "Có lỗi : " + a);
    }    DONE
    var outputContent2 = "MinhContent2.txt" ;                               // Đầu ra  không có mã hoá
    try ( FileWriter writer = new FileWriter( outputContent2 , true)) {
        writer.write("John Henry");
        writer.write("This is my name: Minh vip pro ");
        System.out.println("successfully to file: " + outputContent2 );
    } catch ( IOException a ) {
        System.out.println("Có lỗi r: " + a);
```

11. File Decryption Filter

Write a program that decrypts the file produced by the program. The decryption program should read the contents of the coded file, restore the data to its original state, and write it to another file. → **Only write void main**

```
try {
        String outputContent = "MinhContent3.txt" ;                    // Tên file đầu ra.
        FileWriter writer = new FileWriter(outputContent) ;                    // Create đối tượng để ghi vào file.
        String inputContent = "MinhContent2.txt" ;                    // Tên file đầu vào  --> Tạo đối tượng
        File inputFile = new File(inputContent);
        Scanner inputScanner = new Scanner(inputFile);
        while ( inputScanner.hasNext() ) {
           String currentLine = inputScanner.nextLine() ;
           String encryption = "";
           // Core : Mã hoá
           for ( int i = 0 ; i < currentLine.length() ; i++ ) {
              encryption += (char) (currentLine.charAt(i) - 10) ;
           }
           writer.write(encryption + System.lineSeparator());                    // chuyển vào file đầu ra
        }
        inputScanner.close();
        writer.close();
     } catch ( IOException a )  {
        System.out.println( "Co loi kia " + a.getMessage() );
     }
```