Reading with Scanner

```
import java.io.File;
import java.util.Scanner;
import java.io.FileNotFoundException;

public class ScannerExample {
   public static void main(String[] args) {
      File file = new File("data.txt");
      try (Scanner scanner = new Scanner(file)) {
         while (scanner.hasNextLine()) {
            String line = scanner.nextLine();
            System.out.println(line);
         }
      } catch (FileNotFoundException e) {
         System.err.println("File not found: " + e.getMessage());
      }
   }
}
```

CSV File

```
import java.io.BufferedReader;
import java.io.File;
import java.io.FileReader;
import java.io.IOException;

public class CSVReaderPractice
{
```

```
    public static void main(String args[])
    {
        File filepath=new File("D:\\JJava\\My Exercise\\CSV\\example.csv");

        try(BufferedReader csv=new BufferedReader(new  FileReader(filepath)))
        {
            String line;

            while((line= csv.readLine()) !=null){
                String[] values=line.split(",");
                for (int i = 0; i <values.length; i++) {
                    System.out.print(values[i]+" ");
                }
                System.out.println();

            }
        }catch(IOException e)
        {
            System.out.println("An error occured while reading the file");
            e.printStackTrace();
        }

    }
}
```

Output

apple,orange,mango→apple orange mango

Regex Expression

```
import java.io.BufferedReader;
import java.io.StringReader;
import java.io.IOException;

public class CSVReaderExample {
    public static void main(String[] args) {
        // Simulating reading from a file by using a string
        String data = """
            Name,Age,City,Occupation
            "John Doe",30,"New York, NY",Programmer
            "Jane Smith",25,"Los Angeles, CA",Designer
            "Alice Johnson",28,"San Francisco, CA","Software Engineer"
            """;

        BufferedReader br = new BufferedReader(new StringReader(data));
        try {
            String line = br.readLine(); // Read and discard the header
            while ((line = br.readLine()) != null) {
                String[] values = line.split(",(?=([^\"]*\"[^\"]*\")*[^\"]*$)");
                for (String value : values) {
                    System.out.print(value.trim() + " | ");
                }
                System.out.println(); // Move to a new line after processing each record
            }
        } catch (IOException e) {
            e.printStackTrace();
        }
```

```
    }
}
```

Output

"John Doe" | 30 | "New York, NY" | Programmer |

"Jane Smith" | 25 | "Los Angeles, CA" | Designer |

"Alice Johnson" | 28 | "San Francisco, CA" | "Software Engineer" |

ObjectOutput/InputStream

```
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.ObjectInputStream;
import java.io.ObjectOutputStream;


public class ObjectOutputDemo{
    public static void main(String[] args) {
        try(ObjectOutputStream oos=new ObjectOutputStream(new
FileOutputStream("C:\\Java\\data.bin")))
        {
            Person p=new Person("KYAW Gyi", 22);
            oos.writeObject(p);
        }catch(IOException e){
            e.printStackTrace();
        }
```

```
        try(ObjectInputStream ois=new ObjectInputStream(new
FileInputStream("C:\\Java\\data.bin")))
        {
            Person p1=(Person) ois.readObject();
            System.out.println(p1.toString());

        }catch(IOException e){
            e.printStackTrace();
        }catch(ClassNotFoundException e){
            e.printStackTrace();
        }

    }
}

import java.io.Serializable;

public class Person implements Serializable{
    public String name;
    public int age;

    public Person(String newName, int newAge){
        name=newName;
        age=newAge;

    }
```

```
    public String getName()
    {
        return name;
    }

    public int getAge(){
        return age;
    }

    public String toString(){
        return "name: "+getName()+" age: "+getAge();
    }
}
```