# JSON Java examples

CSE219, Computer Science III

Stony Brook University

http://www.cs.stonybrook.edu/~cse219

```json
{
    "firstName": "John",
    "lastName": "Smith",
    "age": 25,
    "address" : {
        "streetAddress": "21 2nd Street",
        "city": "New York",
        "state": "NY",
        "postalCode": "10021"
    },
    "phoneNumber": [
        {
            "type": "home",
            "number": "212 555-1234"
        },
        {
            "type": "fax",
            "number": "646 555-4567"
        }
    ]
}
```

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```java
import javax.json.Json;
import javax.json.JsonObject;
import javax.json.JsonReader;
import javax.json.JsonWriter;
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.InputStream;
import java.io.OutputStream;
import java.util.Set;

public class JSONTest {
  public static void readTest() throws IOException {
        String jsonFilePath = "person.json";
        InputStream is = new FileInputStream(jsonFilePath);
        JsonReader jsonReader = Json.createReader(is);
        JsonObject json = jsonReader.readObject();
        jsonReader.close();
        is.close();
        Set<String> keys = json.keySet();
        for(String key:keys){
          System.out.println(key + " is " + json.get(key).toString());
        }
        System.out.println("Read test done.");
  }
```

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```java
public static void writeTest() throws FileNotFoundException {
        String jsonFilePath = "person2.json";
        OutputStream os = new FileOutputStream(jsonFilePath);
        JsonWriter jsonWriter = Json.createWriter(os);
        JsonObject personJsonObject = Json.createObjectBuilder()
            .add("name", "John")
            .add("age", "25")
            .build();
        jsonWriter.writeObject(personJsonObject);
        System.out.println("Write test done.");
    }

    public static void main(String[] args) throws IOException {
        readTest();
        writeTest();
    }
}
```