

# i2i Academy

## Training Document

Topic	Apache Kafka
Document Name	KAFKA-EX-03

Document Difficulty Level			
Beginner	Junior	Senior	Expert
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## Document History

Date	Author	Ver	Comments
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## Apache Kafka

### Exercise KAFKA-EX-03:

**Definiton:** Create 2 sample java programs; one for Producer one for Consumer. Publish java objects ( you can use following class ) from Producer app. Read those objects from Consumer app and print them to the console.

**Java Classes & Objects:** <https://www.geeksforgeeks.org/classes-objects-java>

#### Java Program For Class Example:

```
class Student {  
    // data member (also instance variable)  
    int id;  
    // data member (also instance variable)  
    String name;  
    public static void main(String args[])  
    {  
        // creating an object of  
        // Student  
        Student s1 = new Student();  
        System.out.println(s1.id);  
        System.out.println(s1.name);  
    }  
}
```

**Sample Kafka Producer code:** <https://github.com/chrissearle/kafka-java-to-scala/blob/master/java-starter/producer/src/main/java/net/chrissearle/kafka/BasicProducer.java>

**Sample Kafka Consumer code:** <https://github.com/chrissearle/kafka-java-to-scala/blob/master/java-starter/consumer/src/main/java/net/chrissearle/kafka/BasicConsumer.java>

Please provide screenshots to show your work.

## KAFKA-EX-03 Solution:

```
© Main.java  © Producer.java  © Consumer.java  © Student.java ×
1  import java.io.Serializable;
2
3  public class Student implements Serializable { 4 usages
4      private static final long serialVersionUID = 1L; no usages
5
6      int id; 2 usages
7      String name; 2 usages
8
9      public Student(int id, String name) { 1 usage
10         this.id = id;
11         this.name = name;
12     }
13 }
14

© Main.java  © Producer.java  © Consumer.java ×  © Student.java
1  import java.io.FileInputStream;
2  import java.io.IOException;
3  import java.io.ObjectInputStream;
4
5  public class Consumer {
6      public static void main(String[] args) {
7          Student s = null;
8
9          try {
10             FileInputStream fileIn = new FileInputStream("student.ser");
11             ObjectInputStream in = new ObjectInputStream(fileIn);
12
13             s = (Student) in.readObject();
14
15             in.close();
16             fileIn.close();
17         } catch (IOException i) {
18             i.printStackTrace();
19             return;
20         } catch (ClassNotFoundException c) {
21             System.out.println("Student sınıfı bulunamadı.");
22             c.printStackTrace();
23             return;
24         }
25
26         System.out.println("Student Mesnesi:");
27         System.out.println("ID: " + s.id);
28         System.out.println("Name: " + s.name);
29     }
30 }
31
```

```
© Main.java  © Producer.java  © Consumer.java  © Student.java
1  import java.io.FileOutputStream;
2  import java.io.IOException;
3  import java.io.ObjectOutputStream;
4
5  public class Producer {
6  public static void main(String[] args) {
7      Student s = new Student( id:1, name:"Melek Azra Şevik");
8
9      try {
10         FileOutputStream fileOut = new FileOutputStream( name:"student.ser");
11         ObjectOutputStream out = new ObjectOutputStream(fileOut);
12
13         out.writeObject(s);
14
15         out.close();
16         fileOut.close();
17
18         System.out.println("Student nesnesi başarıyla dosyaya yazıldı.");
19     } catch (IOException i) {
20         i.printStackTrace();
21     }
22 }
23
24 }
```

```
Run  Consumer x
C:\Users\asus\.jdk\temurin-21.0.7\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2025.1.3\lib\idea_rt.jar=58851" -Dfile.encoding=UTF-8 -D
Student Nesnesi:
ID: 1
Name: Melek Azra Şevik
Process finished with exit code 0
```