

# Lab-1

CE084

19CEUBS149

## Data Types

1. Student Information : Structured
2. Book Information : Structured
3. Feedback Form : Structured
4. Issuing and returning book information : Structured
5. E-Learning content : unstructured
6. Web Pages : Semi Structured

## Database vs. Data Warehouse

### - Database

- Used in OLTP
- Optimised for write operation
- Current Data
- Application Oriented
- Normalised Data

### - Data Warehouse

- Used in OLAP
- Optimised for read operation
- Historical Data
- Subject Oriented
- Denormalized Data

- Given the spreadsheet file convert it into a csv

<https://www.zamzar.com/convert/xls-to-csv/>

data ☆ 📁 ☁

File Edit View Insert Format Data Tools Extensions Help [Last edit was 2 min](#)

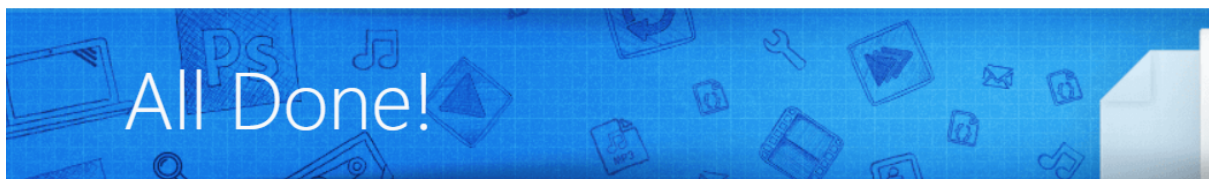
100% £ % .0 .00 123 Default (Ari... 10 B I S

K3 fx

	A	B	C	D	E	F
1	Id	Name	Sem	Branch	CPI	
2	1	Ayarn	8	CE	10	
3	2	Jack	8	CE	10	
4	3	John	8	CE	10	
5						



API FORMATS MY FILES CONVERTERS



Download your converted file now or [convert more files](#)

FILE

STATUS

data.csv

Download

Files are stored for 24 hours ([want longer?](#))

Like 77k

Follow

```
Id,Name,Sem,Branch,CPI
1,Ayarn,8,CE,10
2,Jack,8,CE,10
3,John,8,CE,10
```

- Import a csv into MySQL database table

[Browse](#)
[Structure](#)
[SQL](#)
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⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

✓ Showing rows 0 - 3 (4 total, Query took 0.0011 seconds.)

`SELECT * FROM `data``

☐ Profiling
 [\[ Edit inline \]](#)
[\[ Edit \]](#)
[\[ Explain SQL \]](#)
[\[ Create PHP code \]](#)
[\[ Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows:

+ Options

COL 1	COL 2	COL 3	COL 4	COL 5
Id	Name	Sem	Branch	CPI
1	Ayarn	8	CE	10
2	Jack	8	CE	10
3	John	8	CE	10

☐ Show all | Number of rows: 25 | Filter rows:

Query results operations

[Print](#)
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[Bookmark this SQL query](#)

Label: 
☐ Let every user access this bookmark

☐ Console

- Write a computer program to read records from database and generate data file.
  - XML
  - JSON

## Convert CSV to Database file into sqlite.

```
[user1@hadoop-clone Personal]$ sqlite3
SQLite version 3.7.17 2013-05-20 00:56:22
Enter ".help" for instructions
Enter SQL statements terminated with a ";"
sqlite> .mode csv
sqlite> .import Student.csv Student
Error: no such table: Student
sqlite> CREATE TABLE Student(id integer PRIMARY KEY, name text, age integer, weight integer);
sqlite> .import Student.csv Student
Error: datatype mismatch
sqlite> INSERT INTO Student (7, "abc", 20, 40);
Error: near "7": syntax error
sqlite> INSERT INTO Student VALUES (7, "abc", 20, 40);
sqlite> SELECT * FROM Student;
7,abc,20,40
sqlite> .import Student.csv Student
sqlite> SELECT * FROM Student;
1,a,10,50
2,b,20,23
3,c,40,67
7,abc,20,40
sqlite> .tables
Student
sqlite> .output Student.sql
sqlite> .dump
sqlite> .exit
```

## CSV To XML Using 'convertcsv.com'

- CSV To HTML
- CSV To JSON
- CSV To HTML Table
- CSV To JSON
- CSV To XML
- CSV To Markdown
- CSV To Multi-line Data
- CSV To PDF
- CSV To SQL
- CSV To Word
- CSV To XML
- CSV To YAML
- Excel CSV
- Transpose CSV
- Query CSV with SQL

### To CSV/Excel

- Flat File to CSV
- JSON To CSV
- HTML Links To CSV
- HTML Table To CSV
- JSON To CSV
- XML To CSV
- SQL To CSV
- XML To CSV
- XML To CSV

### Data Tools

- CSV Escape Tool
- CSV Template Engine
- EDA Tool
- CSV Editor
- Generate Test Data
- Email Extractor
- Phone Extractor
- Split Tool on CSV Files
- URL Extractor
- Extract via RegEx
- CSV Home

You have the option of specifying the top-level root name and the XML record name. You can also make each XML name upper or lower case.  
See also [XML to CSV](#)

### Step 1: Select your input

[Enter Data](#) [Choose File](#) [Enter URL](#)

```
id,name,age,weight
1,a,10,50
2,b,20,23
3,c,40,67
```

[Clear Input](#) [Example 1](#) [Example 2 \(Nested\)](#)

Input Records: Header: true Header Fields: 4  
Data Separator: , Fields: 4 Records: 3

### Step 2: Choose input options (optional)

### Step 3: Choose output options (optional)

### Step 4: Create Custom Output via Template (optional)

### Step 5: Generate output

Top-level Root Name:  Each Record XML Name:

[Convert CSV To XML](#) [Convert CSV To XML Properties](#)

Result Data:

```
<?xml version="1.0" encoding="UTF-8"?>
<root>
  <row>
    <id>1</id>
    <name>a</name>
    <age>10</age>
    <weight>50</weight>
  </row>
  <row>
    <id>2</id>
```

Save your result:  [Download Result](#) EOL:

convertcsv.com

## CSV To JSON Using 'csvjson.com'



Turnkey CSV Importer • Installs in minutes

[Home](#) / [csv2json](#)

### CSV or TSV > JSON

To get started, upload or paste your data from Excel (saved as CSV or TSV).

Upload a CSV file

[Browse...](#) No file selected.

Or paste your CSV here

```
Id,name,age,weight
1,a,10,50
2,b,20,23
3,c,40,67
```

[Convert](#)

[Clear](#)

Separator

[Auto-detect](#)

☒ Parse numbers

☒ Parse JSON

☐ Transpose

Output: ☒ Array ☐ Hash ☐ Minify

JSON

```
[
  {
    "Id": 1,
    "name": "a",
    "age": 10,
    "weight": 50
  },
  {
    "Id": 2,
    "name": "b",
    "age": 20,
    "weight": 23
  },
  {
    "Id": 3,
    "name": "c",
    "age": 40,
    "weight": 67
  }
]
```

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[Save](#)

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