## File Encoding of Data Values

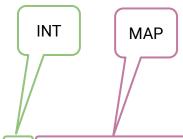
## CSV

100, John, Davis, 15000, 5000 103, Kamila, Peterson, 22000, 3000 104, Ahmed, Khan, 18000, 35000

- 100, first name: Steven\$last name: King, 1987-06-17\$AD PRES\$24000.0\$nan\$90.0, 101\$102\$114\$120\$121\$122\$123\$124\$145\$146\$147\$148\$149\$201 101, first name: Neena\$last name: Kochhar, 1989-09-21\$AD VP\$17000.0\$100.0\$90.0, 108\$200\$203\$204\$205
- 102, first name: Lex\$last name: De Haan, 1993-01-13\$AD VP\$17000.0\$100.0\$90.0,103 103,first name:Alexander\$last name:Hunold,1990-01-03\$IT PROG\$9000.0\$102.0\$60.0,104\$105\$106\$107
- 108, first\_name: Nancy\$last\_name: Greenberg, 1994-08-17\$FI\_MGR\$12000.0\$101.0\$100.0, 109\$110\$111\$112\$113
- 114, first name: Den\$last name: Raphaely, 1994-12-07\$PU MAN\$11000.0\$100.0\$30.0, 115\$116\$117\$118\$119 120, first name: Matthew\$last name: Weiss, 1996-07-18\$ST MAN\$8000.0\$100.0\$50.0, 125\$126\$127\$128\$180\$181\$182\$183
- 121, first name: Adam\$last name: Fripp, 1997-04-10\$ST MAN\$8200.0\$100.0\$50.0,129\$130\$131\$132\$184\$185\$186\$187
- 122, first name: Payam\$last name: Kaufling, 1995-05-01\$ST MAN\$7900.0\$100.0\$50.0,133\$134\$135\$136\$188\$189\$190\$191
- 123, first name: Shanta\$last name: Vollman, 1997-10-10\$ST MAN\$6500.0\$100.0\$50.0,137\$138\$139\$140\$192\$193\$194\$195
- 124, first name: Kevin\$last name: Mourgos, 1999-11-16\$ST MAN\$5800.0\$100.0\$50.0, 141\$142\$143\$144\$196\$197\$198\$199 145.first name:John\$last name:Russell,1996-10-01\$SA MAN\$14000.0\$100.0\$80.0,150\$151\$152\$153\$154\$155
- 146, first name: Karen\$last name: Partners, 1997-01-05\$SA MAN\$13500.0\$100.0\$80.0, 156\$157\$158\$159\$160\$161
- 147, first name: Alberto\$last name: Errazuriz, 1997-03-10\$SA MAN\$12000.0\$100.0\$80.0, 162\$163\$164\$165\$166\$167
- 148, first name: Gerald\$last name: Cambrault, 1999-10-15\$SA MAN\$11000.0\$100.0\$80.0, 168\$169\$170\$171\$172\$173
- 149.first name:Eleni\$last name:Zlotkey.2000-01-29\$SA MAN\$10500.0\$100.0\$80.0.174\$175\$176\$177\$178\$179

```
INT
```

100 first name: Steven\$last name: King .1987-06-17\$AD PRES\$24000.0\$nan\$90.0 .101\$102\$114\$120\$121\$122\$123\$124\$145\$146\$147\$148\$149\$201 101, first name: Neena\$last name: Kochhar, 1989-09-21\$AD VP\$17000.0\$100.0\$90.0, 108\$200\$203\$204\$205 102, first name: Lex\$last name: De Haan, 1993-01-13\$AD VP\$17000.0\$100.0\$90.0,103 103, first name: Alexander\$last name: Hunold, 1990-01-03\$IT PROG\$9000.0\$102.0\$60.0, 104\$105\$106\$107 108, first\_name: Nancy\$last\_name: Greenberg, 1994-08-17\$FI\_MGR\$12000.0\$101.0\$100.0, 109\$110\$111\$112\$113 114, first name: Den\$last name: Raphaely, 1994-12-07\$PU MAN\$11000.0\$100.0\$30.0, 115\$116\$117\$118\$119 120, first name: Matthew\$last name: Weiss, 1996-07-18\$ST MAN\$8000.0\$100.0\$50.0, 125\$126\$127\$128\$180\$181\$182\$183 121, first name: Adam\$last name: Fripp, 1997-04-10\$ST\_MAN\$8200.0\$100.0\$50.0,129\$130\$131\$132\$184\$185\$186\$187 122.first name:Payam\$last name:Kaufling.1995-05-01\$ST MAN\$7900.0\$100.0\$50.0.133\$134\$135\$136\$188\$189\$190\$191 123, first name: Shanta\$last name: Vollman, 1997-10-10\$ST MAN\$6500.0\$100.0\$50.0,137\$138\$139\$140\$192\$193\$194\$195 124, first name: Kevin\$last name: Mourgos, 1999-11-16\$ST MAN\$5800.0\$100.0\$50.0, 141\$142\$143\$144\$196\$197\$198\$199 145.first name:John\$last name:Russell,1996-10-01\$SA MAN\$14000.0\$100.0\$80.0,150\$151\$152\$153\$154\$155 146, first name: Karen\$last name: Partners, 1997-01-05\$SA MAN\$13500.0\$100.0\$80.0, 156\$157\$158\$159\$160\$161 147, first name: Alberto\$last name: Errazuriz, 1997-03-10\$SA MAN\$12000.0\$100.0\$80.0, 162\$163\$164\$165\$166\$167 148, first name: Gerald\$last name: Cambrault, 1999-10-15\$SA MAN\$11000.0\$100.0\$80.0, 168\$169\$170\$171\$172\$173 149.first name:Eleni\$last name:Zlotkey.2000-01-29\$SA MAN\$10500.0\$100.0\$80.0.174\$175\$176\$177\$178\$179



100 first name: Steven\$last\_name: King 1987-06-17\$AD\_PRES\$24000.0\$nan\$90.0,101\$102\$114\$120\$121\$122\$123\$124\$145\$146\$147\$148\$149\$201

101.first name:Neena\$last name:Kochhar,1989-09-21\$AD VP\$17000.0\$100.0\$90.0,108\$200\$203\$204\$205 102, first name: Lex\$last name: De Haan, 1993-01-13\$AD VP\$17000.0\$100.0\$90.0,103

103, first name: Alexander\$last name: Hunold, 1990-01-03\$IT PROG\$9000.0\$102.0\$60.0, 104\$105\$106\$107

108, first name: Nancy\$last name: Greenberg, 1994-08-17\$FI MGR\$12000.0\$101.0\$100.0, 109\$110\$111\$112\$113

114, first name: Den\$last name: Raphaely, 1994-12-07\$PU MAN\$11000.0\$100.0\$30.0, 115\$116\$117\$118\$119

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123, first name: Shanta\$last name: Vollman, 1997-10-10\$ST MAN\$6500.0\$100.0\$50.0,137\$138\$139\$140\$192\$193\$194\$195 124, first name: Kevin\$last name: Mourgos, 1999-11-16\$ST MAN\$5800.0\$100.0\$50.0, 141\$142\$143\$144\$196\$197\$198\$199

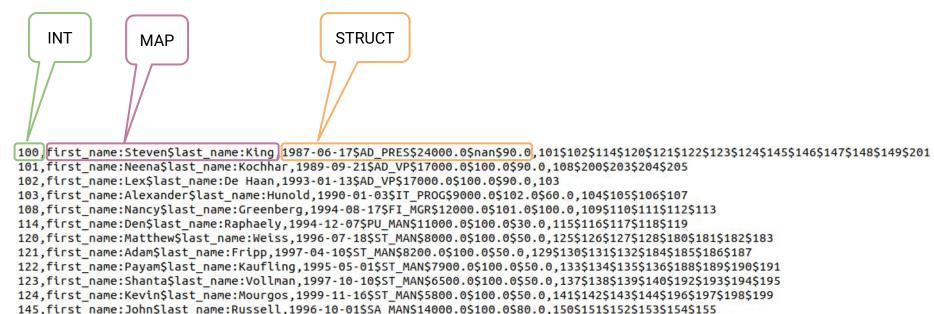
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146, first name: Karen\$last name: Partners, 1997-01-05\$SA MAN\$13500.0\$100.0\$80.0, 156\$157\$158\$159\$160\$161

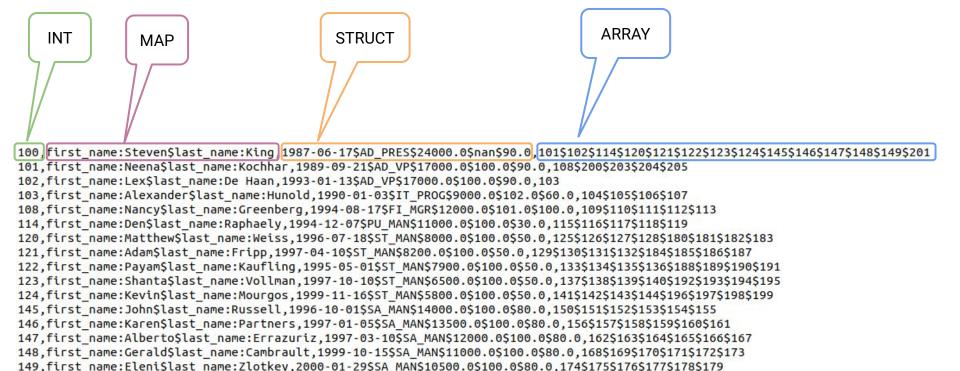
147, first name: Alberto\$last name: Errazuriz, 1997-03-10\$SA MAN\$12000.0\$100.0\$80.0, 162\$163\$164\$165\$166\$167

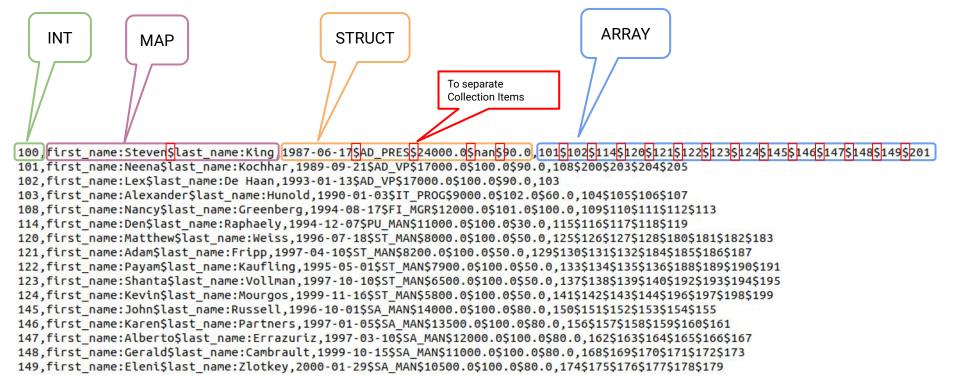
148, first name: Gerald\$last\_name: Cambrault,1999-10-15\$SA\_MAN\$11000.0\$100.0\$80.0,168\$169\$170\$171\$172\$173

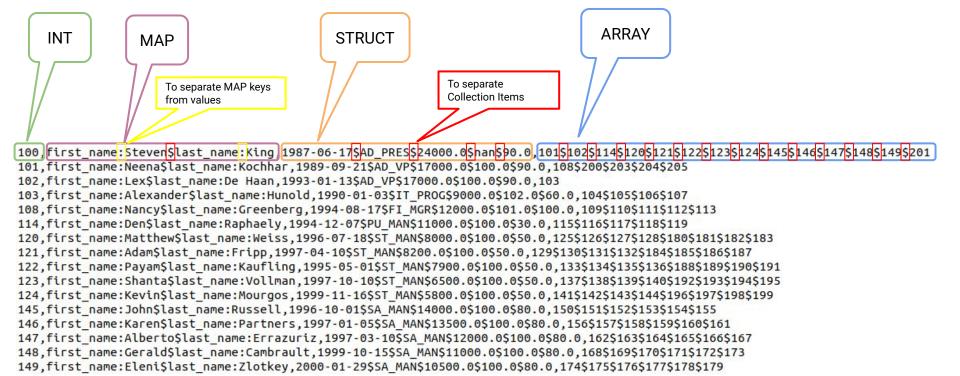
149.first name:Eleni\$last name:Zlotkey.2000-01-29\$\$A MAN\$10500.0\$100.0\$80.0.174\$175\$176\$177\$178\$179



146,first\_name:Karen\$last\_name:Partners,1997-01-05\$SA\_MAN\$13500.0\$100.0\$80.0,156\$157\$158\$159\$160\$161
147,first\_name:Alberto\$last\_name:Errazuriz,1997-03-10\$SA\_MAN\$12000.0\$100.0\$80.0,162\$163\$164\$165\$166\$167
148,first\_name:Gerald\$last\_name:Cambrault,1999-10-15\$SA\_MAN\$11000.0\$100.0\$80.0,168\$169\$170\$171\$172\$173
149.first\_name:Eleni\$last\_name:Zlotkey.2000-01-29\$SA\_MAN\$10500.0\$100.0\$80.0,174\$175\$176\$177\$178\$179







CREATE TABLE EMP



CREATE TABLE EMP

```
( emp_id int, name map<string, string>, job struct<doj: date, job_id: int, salary: float, manager_id: int, dep_id: int>, team array<int>
```



```
CREATE TABLE EMP
```

```
( emp_id int,
    name map<string, string>,
    job struct<doj: date,
        job_id: int,
        salary: float,
        manager_id: int,
        dep_id: int>,
    team array<int>
```

COMMENT 'Table for employees data'

```
CREATE TABLE EMP
```

```
( emp_id int,
    name map<string, string>,
    job struct<doj: date,
    job_id: int,
    salary: float,
    manager_id: int,
    dep_id: int>,
    team array<int>)
```

COMMENT 'Table for employees data'

ROW FORMAT DELIMITED

```
CREATE TABLE EMP
         emp_id int,
         name map<string, string>,
         job struct<doj: date,
                    job_id: int,
                    salary: float,
                    manager_id: int,
                    dep_id: int>,
         team array<int>
COMMENT 'Table for employees data'
ROW FORMAT DELIMITED
FIELDS TERMINATED BY ",
```

```
CREATE TABLE EMP
         emp_id int,
         name map<string, string>,
         job struct<doj: date,
                    job_id: int,
                    salary: float,
                    manager_id: int,
                    dep_id: int>,
         team array<int>
COMMENT 'Table for employees data'
ROW FORMAT DELIMITED
FIELDS TERMINATED BY ",
COLLECTION ITEMS TERMINATED BY '$'
```

```
CREATE TABLE EMP
         emp_id int,
         name map<string, string>,
         job struct<doj: date,
                    job_id: int,
                    salary: float,
                    manager_id: int,
                    dep_id: int>,
         team array<int>
COMMENT 'Table for employees data'
ROW FORMAT DELIMITED
FIELDS TERMINATED BY ",
COLLECTION ITEMS TERMINATED BY '$'
MAP KEYS TERMINATED BY ':'
```

```
CREATE TABLE EMP
         emp_id int,
         name map<string, string>,
         job struct<doj: date,
                   job_id: int,
                   salary: float,
                   manager_id: int,
                   dep_id: int>,
         team array<int>
COMMENT 'Table for employees data'
ROW FORMAT DELIMITED
FIELDS TERMINATED BY ",
COLLECTION ITEMS TERMINATED BY '$'
MAP KEYS TERMINATED BY ':'
STORED AS TEXTFILE
```

```
CREATE TABLE EMP
         emp_id int,
         name map<string, string>,
         job struct<doj: date,
                    job_id: int,
                    salary: float,
                    manager_id: int,
                    dep_id: int>,
         team array<int>
COMMENT 'Table for employees data'
ROW FORMAT DELIMITED
FIELDS TERMINATED BY ",
COLLECTION ITEMS TERMINATED BY '$'
MAP KEYS TERMINATED BY ':'
STORED AS TEXTFILE
```

## Thank You!