

The logo for Analytics Vidhya, featuring a stylized grey arrow pointing upwards and to the right, with the words "Analytics" and "Vidhya" stacked vertically in a grey sans-serif font.

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_PRESS\$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
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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

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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

MAP

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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

MAP

STRUCT

100,first_name:Steven\$last_name:King,1987-06-17\$AD_PRESS\$24000.0\$nan\$90.0,101\$102\$114\$120\$121\$122\$123\$124\$145\$146\$147\$148\$149\$201
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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

MAP

STRUCT

ARRAY

```
100,first_name:Steven$last_name:King,1987-06-17$AD_PRESS$24000.0$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$191
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145,first_name:John$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

MAP

STRUCT

To separate
Collection Items

ARRAY

```
100,first_name:Steven$last_name:King,1987-06-17$AD_PRESS$24000.0$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$167
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149,first_name:Eleni$last_name:Zlotkey,2000-01-29$SA_MAN$10500.0$100.0$80.0,174$175$176$177$178$179
```


INT

MAP

STRUCT

ARRAY

To separate MAP keys
from values

To separate
Collection Items

```
100,first_name:Steven$last_name:King,1987-06-17$AD_PRESS$24000.0$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$205
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149,first_name:Eleni$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!