

HBase

Statement:

```
create 'employees', {NAME=> 'private'}, {NAME=> 'public'}
put 'employees', 'ID1', 'private:ssn', '111-222-334'
put 'employees', 'ID2', 'private:ssn', '222-333-445'
put 'employees', 'ID3', 'private:address', '123 State St.'
put 'employees', 'ID1', 'private:address', '243 N. Wabash Av.'
```

```
hbase(main):001:0> create 'employees', {NAME=> 'private'}, {NAME=> 'public'}
0 row(s) in 0.6310 seconds

hbase(main):002:0> put 'employees', 'ID1', 'private:ssn', '111-222-334'
0 row(s) in 0.1000 seconds

hbase(main):003:0> put 'employees', 'ID2', 'private:ssn', '222-333-445'
0 row(s) in 0.0170 seconds

hbase(main):004:0> put 'employees', 'ID3', 'private:address', '123 State St.'
0 row(s) in 0.0150 seconds

hbase(main):005:0> put 'employees', 'ID1', 'private:address', '243 N. Wabash Av.'
0 row(s) in 0.0130 seconds
```

Output:

scan 'employees'

```
hbase(main):006:0> scan 'employees'
ROW                                COLUMN+CELL
ID1                                column=private:address, timestamp=1602827208447, value=243 N. Wabash Av.
ID1                                column=private:ssn, timestamp=1602827208258, value=111-222-334
ID2                                column=private:ssn, timestamp=1602827208341, value=222-333-445
ID3                                column=private:address, timestamp=1602827208405, value=123 State St.
3 row(s) in 0.0560 seconds
```

2 new columns to the private family

Statement:

```
put 'employees', 'ID1', 'private:homephone', '9856765243'
put 'employees', 'ID2', 'private:homephone', '5496521489'
```

```
hbase(main):007:0> put 'employees', 'ID1', 'private:homephone', '9856765243'
0 row(s) in 0.0300 seconds

hbase(main):008:0> put 'employees', 'ID2', 'private:homephone', '5496521489'
0 row(s) in 0.0070 seconds
```

Output:

scan 'employees'

```
hbase(main):009:0> scan 'employees'
ROW                                COLUMN+CELL
ID1                                column=private:address, timestamp=1602827208447, value=243 N. Wabash Av.
ID1                                column=private:homephone, timestamp=1602827519481, value=9856765243
ID1                                column=private:ssn, timestamp=1602827208258, value=111-222-334
ID2                                column=private:homephone, timestamp=1602827524717, value=5496521489
ID2                                column=private:ssn, timestamp=1602827208341, value=222-333-445
ID3                                column=private:address, timestamp=1602827208405, value=123 State St.
3 row(s) in 0.0360 seconds
```

Statement:

```
put 'employees', 'ID3', 'private:salary', '85000'
put 'employees', 'ID4', 'private:salary', '65000'
```

```
hbase(main):010:0> put 'employees', 'ID3', 'private:salary', '85000'
0 row(s) in 0.0110 seconds

hbase(main):011:0>
hbase(main):012:0* put 'employees', 'ID4', 'private:salary', '65000'
0 row(s) in 0.0130 seconds
```

Output:

scan 'employees'

```
hbase(main):013:0> scan 'employees'
ROW                                COLUMN+CELL
ID1                                column=private:address, timestamp=1602827208447, value=243 N. Wabash Av.
ID1                                column=private:homephone, timestamp=1602827519481, value=9856765243
ID1                                column=private:ssn, timestamp=1602827208258, value=111-222-334
ID2                                column=private:homephone, timestamp=1602827524717, value=5496521489
ID2                                column=private:ssn, timestamp=1602827208341, value=222-333-445
ID3                                column=private:address, timestamp=1602827208405, value=123 State St.
ID3                                column=private:salary, timestamp=1602827714428, value=85000
ID4                                column=private:salary, timestamp=1602827716045, value=65000
4 row(s) in 0.0360 seconds
```

1 new column to the public family

Statement:

```
put 'employees', 'ID2', 'public:name', 'Bob Riley'
put 'employees', 'ID1', 'public:name', 'Ed Scot'
```

```
hbase(main):014:0> put 'employees', 'ID2', 'public:name', 'Bob Riley'
0 row(s) in 0.0100 seconds

hbase(main):015:0> put 'employees', 'ID1', 'public:name', 'Ed Scot'
0 row(s) in 0.0110 seconds
```

Output:

scan 'employees'

```
hbase(main):016:0> scan 'employees'
ROW                                COLUMN+CELL
ID1                                column=private:address, timestamp=1602827208447, value=243 N. Wabash Av.
ID1                                column=private:homephone, timestamp=1602827519481, value=9856765243
ID1                                column=private:ssn, timestamp=1602827208258, value=111-222-334
ID1                                column=public:name, timestamp=1602827873389, value=Ed Scot
ID2                                column=private:homephone, timestamp=1602827524717, value=5496521489
ID2                                column=private:ssn, timestamp=1602827208341, value=222-333-445
ID2                                column=public:name, timestamp=1602827867793, value=Bob Riley
ID3                                column=private:address, timestamp=1602827208405, value=123 State St.
ID3                                column=private:salary, timestamp=1602827714428, value=85000
ID4                                column=private:salary, timestamp=1602827716045, value=65000
4 row(s) in 0.0550 seconds
```

Create a brand new family and add 3 new columns

Statement:

```
disable 'employees'
alter 'employees', 'exception'
enable 'employees'
```

```
hbase(main):017:0> disable 'employees'
0 row(s) in 2.0570 seconds

hbase(main):018:0>
hbase(main):019:0* alter 'employees', 'exception'
0 row(s) in 0.0350 seconds

hbase(main):020:0>
hbase(main):021:0* enable 'employees'
0 row(s) in 2.0290 seconds
```

Statement:

```
put 'employees', 'ID3', 'exception:manager_name', 'Alicia Jones'
put 'employees', 'ID1', 'exception:manager_name', 'Maria Lopez'
```

```
hbase(main):022:0> put 'employees', 'ID3', 'exception:manager_name', 'Alicia Jones'
0 row(s) in 0.0110 seconds

hbase(main):023:0> put 'employees', 'ID1', 'exception:manager_name', 'Maria Lopez'
0 row(s) in 0.0060 seconds
```

Output:

scan 'employees'

```
hbase(main):024:0> scan 'employees'
ROW                                COLUMN+CELL
ID1                                column=exception:manager_name, timestamp=1602828214158, value=Maria Lopez
ID1                                column=private:address, timestamp=1602827208447, value=243 N. Wabash Av.
ID1                                column=private:homephone, timestamp=1602827519481, value=9856765243
ID1                                column=private:ssn, timestamp=1602827208258, value=111-222-334
ID1                                column=public:name, timestamp=1602827873389, value=Ed Scot
ID2                                column=private:homephone, timestamp=1602827524717, value=5496521489
ID2                                column=private:ssn, timestamp=1602827208341, value=222-333-445
ID2                                column=public:name, timestamp=1602827867793, value=Bob Riley
ID3                                column=exception:manager_name, timestamp=1602828212807, value=Alicia Jones
ID3                                column=private:address, timestamp=1602827208405, value=123 State St.
ID3                                column=private:salary, timestamp=1602827714428, value=85000
ID4                                column=private:salary, timestamp=1602827716045, value=65000
4 row(s) in 0.0290 seconds
```

Statement:

```
put 'employees', 'ID5', 'exception:department', 'public'
put 'employees', 'ID3', 'exception:department', 'federal'
```

```
hbase(main):025:0> put 'employees', 'ID5', 'exception:department', 'public'
0 row(s) in 0.0150 seconds

hbase(main):026:0>
hbase(main):027:0* put 'employees', 'ID3', 'exception:department', 'federal'
0 row(s) in 0.0070 seconds
```

Output:

scan 'employees'

```
hbase(main):028:0> scan 'employees'
ROW                                COLUMN+CELL
ID1                                column=exception:manager_name, timestamp=1602828214158, value=Maria Lopez
ID1                                column=private:address, timestamp=1602827208447, value=243 N. Wabash Av.
ID1                                column=private:homephone, timestamp=1602827519481, value=9856765243
ID1                                column=private:ssn, timestamp=1602827208258, value=111-222-334
ID1                                column=public:name, timestamp=1602827873389, value=Ed Scot
ID2                                column=private:homephone, timestamp=1602827524717, value=5496521489
ID2                                column=private:ssn, timestamp=1602827208341, value=222-333-445
ID2                                column=public:name, timestamp=1602827867793, value=Bob Riley
ID3                                column=exception:department, timestamp=1602828431835, value=federal
ID3                                column=exception:manager_name, timestamp=1602828212807, value=Alicia Jones
ID3                                column=private:address, timestamp=1602827208405, value=123 State St.
ID3                                column=private:salary, timestamp=1602827714428, value=85000
ID4                                column=private:salary, timestamp=1602827716045, value=65000
ID5                                column=exception:department, timestamp=1602828431805, value=public
5 row(s) in 0.0730 seconds
```

Statement:

put 'employees', 'ID2', 'exception:workphone', '6579263146'

put 'employees', 'ID4', 'exception:workphone', '8492603124'

```
hbase(main):029:0> put 'employees', 'ID2', 'exception:workphone', '6579263146'
0 row(s) in 0.0100 seconds

hbase(main):030:0> put 'employees', 'ID4', 'exception:workphone', '8492603124'
0 row(s) in 0.0120 seconds
```

Output:

scan 'employees'

```
hbase(main):031:0> scan 'employees'
ROW                                COLUMN+CELL
ID1                                column=exception:manager_name, timestamp=1602828214158, value=Maria Lopez
ID1                                column=private:address, timestamp=1602827208447, value=243 N. Wabash Av.
ID1                                column=private:homephone, timestamp=1602827519481, value=9856765243
ID1                                column=private:ssn, timestamp=1602827208258, value=111-222-334
ID1                                column=public:name, timestamp=1602827873389, value=Ed Scot
ID2                                column=exception:workphone, timestamp=1602828621151, value=6579263146
ID2                                column=private:homephone, timestamp=1602827524717, value=5496521489
ID2                                column=private:ssn, timestamp=1602827208341, value=222-333-445
ID2                                column=public:name, timestamp=1602827867793, value=Bob Riley
ID3                                column=exception:department, timestamp=1602828431835, value=federal
ID3                                column=exception:manager_name, timestamp=1602828212807, value=Alicia Jones
ID3                                column=private:address, timestamp=1602827208405, value=123 State St.
ID3                                column=private:salary, timestamp=1602827714428, value=85000
ID4                                column=exception:workphone, timestamp=1602828622407, value=8492603124
ID4                                column=private:salary, timestamp=1602827716045, value=65000
ID5                                column=exception:department, timestamp=1602828431805, value=public
5 row(s) in 0.0310 seconds
```