

1 Import data

1.1 Friend

```
hbase(main)> put 'xguo8788:friend','3','friend','[78,255]'
hbase(main)> put 'xguo8788:friend','3','artist','[Pleq, Segue, Max Richter]'
hbase(main)> put 'xguo8788:friend','78','friend','[3,255]'
hbase(main)> put 'xguo8788:friend','78','artist','[Pleq, Radiohead, Infected Mushroom]'
hbase(main)> put 'xguo8788:friend','255','friend','[3,78]'
hbase(main)> put 'xguo8788:friend','255','artist','[Portishead, Pleq, Deru]'
```

1.2 Tag

```
hbase(main)> put 'xguo8788:tag','Justin Bieber:1291160000000','tag:403','canadian'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1270070000000','tag:1559','rap'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1277940000000','tag:1525','love it'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1275340000000','tag:1632','justin bieber jaden
↳ smith'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1272660000000','tag:1795','hip-hop'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1288570000000','tag:1741','want to see live'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1257030000000','tag:1145','rnb'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1304610000000','tag:1145','haterscanstfu'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1249080000000','tag:11','rnb'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1293840000000','tag:671','american idol'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1283290000000','tag:1410','guilty pleasure'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1280610000000','tag:646','fun'
hbase(main)> put 'xguo8788:tag','Justin Bieber:1296510000000','tag:646','hip hop'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1225490000000','tag:329','wow'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1212270000000','tag:361','sexy'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1235860000000','tag:340','female vocalists'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1228090000000','tag:405','dance'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1217540000000','tag:405','dirty'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1230760000000','tag:380','favorites'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1209590000000','tag:421','pop'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1222810000000','tag:2069','mine'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1154380000000','tag:2031','pop'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1204330000000','tag:1572','amazing'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1196460000000','tag:1572','female vocalists'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1220220000000','tag:1652','pop'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1175380000000','tag:1799','female'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1233440000000','tag:1253','romantic'
hbase(main)> put 'xguo8788:tag','Christina Aguilera:1201820000000','tag:1283','summer song'
```

1.3 Weight

```
hbase(main)> put 'xguo8788:weight','Christina Aguilera:7945_302','user:302','7945'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:411_2037','user:2037','411'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:569_327','user:327','569'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:47630_2059','user:2059','47630'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:7099_310','user:310','7099'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:5779_2031','user:2031','5779'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:665_330','user:330','665'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:708_335','user:335','708'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:687_322','user:322','687'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:42_348','user:348','42'
hbase(main)> put 'xguo8788:weight','Christina Aguilera:4_13','user:13','4'
hbase(main)> put 'xguo8788:weight','Katy Perry:1747_7','user:7','1747'
hbase(main)> put 'xguo8788:weight','Katy Perry:347_8','user:8','347'
hbase(main)> put 'xguo8788:weight','Katy Perry:347_11','user:11','347'
hbase(main)> put 'xguo8788:weight','Katy Perry:1064_12','user:12','1064'
hbase(main)> put 'xguo8788:weight','Katy Perry:2_13','user:13','2'
hbase(main)> put 'xguo8788:weight','Katy Perry:1089_17','user:17','1089'
hbase(main)> put 'xguo8788:weight','Katy Perry:252_21','user:21','252'
hbase(main)> put 'xguo8788:weight','Katy Perry:1729_24','user:24','1729'
hbase(main)> put 'xguo8788:weight','Katy Perry:68_29','user:29','68'
hbase(main)> put 'xguo8788:weight','Katy Perry:512_30','user:30','512'
hbase(main)> put 'xguo8788:weight','Katy Perry:95_38','user:38','95'
```

1.4 User

```
hbase(main)> put 'xguo8788:user','3:1246400000000','artist:Pleq','glitch'
hbase(main)> put 'xguo8788:user','3:1235860000000','artist:Pleq','female vocalist'
hbase(main)> put 'xguo8788:user','3:1264980000000','artist:Pleq','ambient'
hbase(main)> put 'xguo8788:user','3:1233440000000','artist:Pleq','experimental'
hbase(main)> put 'xguo8788:user','3:1280610000000','artist:Pleq','mille plateaux'
hbase(main)> put 'xguo8788:user','3:1272660000000','artist:Pleq','field recording'
hbase(main)> put 'xguo8788:user','3:1267400000000','artist:Pleq','clicks'n'cuts'
hbase(main)> put 'xguo8788:user','3:1254350000000','artist:Pleq','glitch hop'
hbase(main)> put 'xguo8788:user','3:1288570000000','artist:Pleq','basses frequences'
hbase(main)> put 'xguo8788:user','3:1285880000000','artist:Pleq','databloem'
hbase(main)> put 'xguo8788:user','3:1283290000000','artist:Pleq','ambient'
hbase(main)> put 'xguo8788:user','3:1251760000000','artist:Pleq','october man recordings'
hbase(main)> put 'xguo8788:user','4:1196460000000','artist:Duran Duran','new wave'
hbase(main)> put 'xguo8788:user','4:1191190000000','artist:Air','electronic'
hbase(main)> put 'xguo8788:user','4:1177970000000','artist:Scissor Sisters','glam rock'
hbase(main)> put 'xguo8788:user','4:1172700000000','artist:Duran Duran Sisters','80s'
hbase(main)> put 'xguo8788:user','4:1193870000000','artist:Stereophonics','rock'
hbase(main)> put 'xguo8788:user','4:1188600000000','artist:God Is an Astronaut','ambient rock'
hbase(main)> put 'xguo8788:user','4:1183240000000','artist:Pink Floyd','psychedelic rock'
hbase(main)> put 'xguo8788:user','4:1180650000000','artist:Deep Forest','ambient'
hbase(main)> put 'xguo8788:user','4:1175380000000','artist:Mew','alternative rock'
```

2 Query

- Given a user id, find all artists the user's friends listen.

```
hbase(main)> get 'xguo8788:friend','3','friend'
hbase(main)> get 'xguo8788:friend','78','artist'
hbase(main)> get 'xguo8788:friend','255','artist'
```

- Given an artist name, find the most recent 10 tags that have been assigned to it.

```
hbase(main)> scan 'xguo8788:tag',{REVERSED=>true, STARTROW=>'Justin A',ENDROW=>'Justin
↪ C',LIMIT=>10}
```

- Given an artist name, find the top 10 users based on their respective listening counts of this artist. Display both the user id and the listening count.

```
hbase(main)> scan 'xguo8788:weight',{REVERSED=>true, STARTROW=>'Christina
↪ Ah',ENDROW=>'Christina Af',LIMIT=>10}
```

- Given a user id, find the most recent 10 artists the user has assigned tag to.

```
hbase(main)> scan 'xguo8788:user',{REVERSED=>true,STARTROW=>'4',ENDROW=>'3',LIMIT=>10}
```