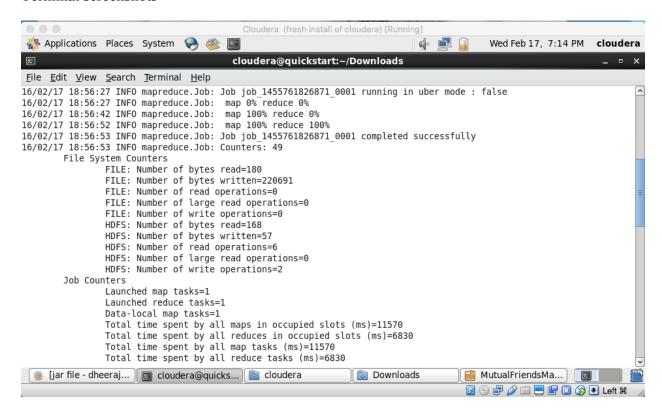
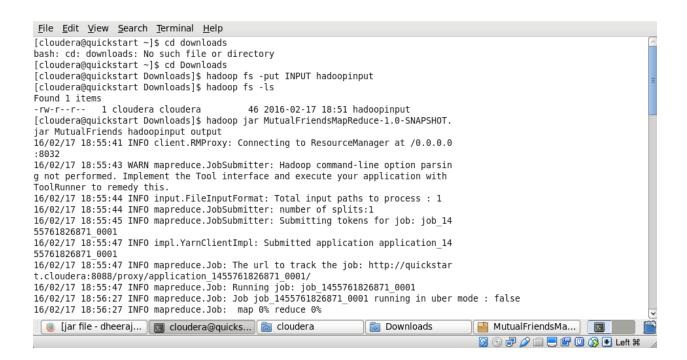
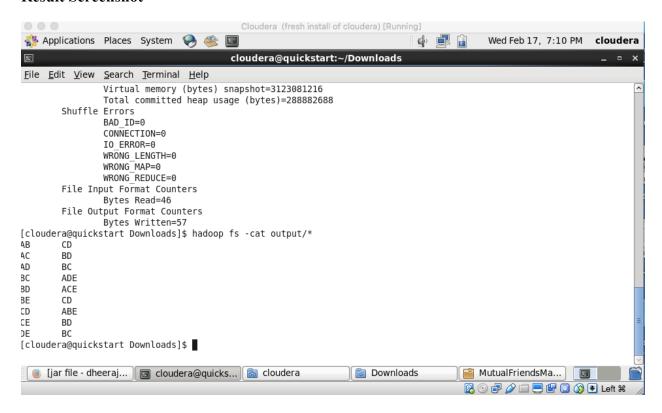
1) Hadoop Map Reduce for Mutual Friends on Facebook

Terminal screenshots





Result Screenshot



Code

```
MutualFriendsHadoopMapReduce-master
                                                                                                                                                                                                                                                                    18 ▼ ▶ W Ø 📾 Q
                                                    MutualFriendsHadoopMapReduce-master [Mutua import ...
      ▶ 🗀 .idea
▼ 🗀 src
                                                                             mpublic class MutualFriends {
       ▼ 🗀 main
                                                                                            public static class FriendsMapper
    extends Mapper<Dbject, Text, Text, Text> {
    private Text m_id = new Text();
    private Text m_others = new Text();
                ₩ Ant Build
           MutualFriendsMapReduce.iml
                                                                                                  public void map(Object key, Text value, Context context)
    throws IOException, InterruptedException {
    // In our case, the key is null and the value is one line of our input file.
    // Split by space to separate the user and its friends list.
    String inte = value.toString();
    String[] split = line.split("");
    String[] split = line.split("");
    String[] friends = Arrays.copyOfRange(split, 1, split.length);
           m pom.xml
           README.md
      External Libraries
          < 1.8 > (/Library/Java/JavaVirtualMachines/jd

    ► ☐ Maven: aopalliance:aopalliance:1.0
    ► ☐ Maven: asm:asm:3.1

       Maven: com.google.code.findbugs:jsr305:1.3.
       Maven: com.google.code.gson:gson:2.2.4
                                                                                                          // For each friend in the list, output the (UserFriend, ListOfFriends) pair
for(String friend: friends) {
   String others = line.replace(subject, "").replace(" ", "");
   String id = subject.compareTo(friend) < 0 ? subject*friend: friend+subject;
   m id.ser(id):</pre>
          Maven: com.google.guava:guava:11.0.2
          Maven: com.google.inject.extensions:guice-somMaven: com.google.inject:guice:3.0
                                                                                                               string id = subject.compare()(
m_id.set(id);
m_others.set(others);
context.write(m_id, m_others);
          Maven: com.google.protobuf:protobuf-java:2.
Maven: com.jamesmurty.utils:java-xmlbuilder
          Maven: com.icraft:isch:0.1.42
          Maven: com.sun.jersey.contribs:jersey-guice:
                                                                                             public static class FriendsReducer
    extends Reducer<Text, Text, Text> {
    private Text m_result = new Text();
          Maven: com.sun.jersey:jersey-core:1.9
Maven: com.sun.jersey:jersey-json:1.9
       Maven: com.sun.jersey:jersey-server:1.9
      // Calculates intersection of two given Strings, i.e. friends lists
private String intersection(String s1, String s2) {
    HashSet-Character > h1 = new HashSet → ();
    HashSet<Character > h2 = new HashSet → ();
          Maven: commons-beanutils:commons-beanu
          Maven: commons-beanutils:commons-beanu
                                                                                                         for(int i = 0; i < s1.length(); i++) {
    h1.add(s1.charAt(i));</pre>
       ▶ 🛅 Maven: commons-cli:commons-cli:1.2
      ► ☐ Maven: commons-codec:commons-codec:1.4
► ☐ Maven: commons-collections:commons-colle
                                                                                                         for(int i = 0; i < s2.length(); i++) {
    h2.add(s2.charAt(i));</pre>
      ▶ Mayen: commons-configuration:commons-co
           Event Log
                                                                                                                                                                                                                                                                        37:14 LF≑ UTF-8≑ 🚡 🚍
```

2) Face Detector using Face Plus Plus API

