```
1 "C:\Users\anupr\Documents\Machine Learning and Data Science
     user id movie id rating
                                           title
                    50
 3 0
          0
                             5 Star Wars (1977)
 4 1
         290
                    50
                             5 Star Wars (1977)
 5 2
         79
                    50
                             4 Star Wars (1977)
 6 3
           2
                    50
                             5 Star Wars (1977)
7 4
           8
                    50
                            5 Star Wars (1977)
8 user id
 9 0
      NaN
10 1
       4.0
11 2
      NaN
12 3
      NaN
13 4
      NaN
14 Name: Apollo 13 (1995), dtype: float64
15 C:\Users\anupr\Documents\Machine Learning and Data Science
16 c = cov(x, y, rowvar)
17 C:\Users\anupr\Documents\Machine Learning and Data Science
18 c *= np.true divide(1, fact)
19
                                         rating
20 title
21 101 Dalmatians (1996)
                                       2.908257
22 12 Angry Men (1957)
                                       4.344000
23 2 Days in the Valley (1996)
                                       3.225806
24 20,000 Leagues Under the Sea (1954) 3.500000
25 2001: A Space Odyssey (1968)
                                       3.969112
26 Top five recommended movies for you are:
27
                             Rating Similarity percentage
28 title
29 Apollo 13 (1995)
                                               100.000000
                          3.931159
30 Red Corner (1997)
                          3.385965
                                                 60.604322
31 Addicted to Love (1997) 3.166667
                                                60.416343
32 Michael (1996)
                                                58.047187
                          3.319328
33 Peacemaker, The (1997) 3.272059
                                                53.028029
34
35 Process finished with exit code 0
36
```