In the first assignment submission, I forget to answer section 2 of questions 9 and 10. Below is my answer to these sections:

Problem 9.2

- I just changed the conditional statement, in question 9, from $int(age[user]) <= 40$ to $int(age[user]) >= 40$:

- Source code

```
rating = {}
for user in prefs.keys():
  if gender[user] == 'F':
    continue
  if int(age[user]) >= 40:
    continue
  for key,value in prefs[user].iteritems():
            rating.setdefault(key,[])
            rating[key].append(value)
average = {}
for movie in rating.keys():
  avg = np.mean(rating[movie])
  average[movie] = avg

sorted_x = sorted(average.iteritems(), key=operator.itemgetter(1))
sorted_x.reverse()
print (" ##### number [9] solution ##### ")
for (key,value) in sorted_x[0:50]:
 print key,' ... ',value
```

- Output

```
        Movie                       Average-ratings(by men under 40)
        ------------------------------------------------------------
        Delta of Venus (1994)                        5.0  (*)
        Santa with Muscles (1996)                    5.0
        Crossfire (1947)                             5.0
        Leading Man, The (1996)                      5.0
        Love Serenade (1996)                         5.0
        Prefontaine (1997)                           5.0
        Aiqing wansui (1994)                         5.0
        Love in the Afternoon (1957)                 5.0
        Star Kid (1997)                              5.0
        Angel Baby (1995)                            5.0
        Maya Lin: A Strong Clear Vision (1994)       5.0
        Entertaining Angels: The Dorothy Day Story (1996) 5.0
```

```
Magic Hour, The (1998)                              5.0
Quiet Room, The (1996)                              5.0
Saint of Fort Washington, The (1993)                5.0
Perfect Candidate, A (1996)                         5.0
Letter From Death Row, A (1998)                     5.0
```

Problem 10.2

- I just changed the conditional statement, in question 10, from $int(age[user]) <= 40$ to $int(age[user]) >= 40$:

- Source code

```
rating = {}
for user in prefs.keys():
  if gender[user] == 'M':
    continue
  if int(age[user]) >= 40:
    continue
  for key,value in prefs[user].iteritems():
            rating.setdefault(key,[])
            rating[key].append(value)
average = {}
for movie in rating.keys():
  avg = np.mean(rating[movie])
  average[movie] = avg

sorted_x = sorted(average.iteritems(), key=operator.itemgetter(1))
sorted_x.reverse()
print (" ##### number [10] solution ##### ")
for (key,value) in sorted_x[0:25]:
 print key,' ... ',value
```

- Output

```
        Movie                     Average-ratings(by women under 40)
        -------------------------------------------------------------
        Backbeat (1993)                             5.0  (*)
        Prefontaine (1997)                          5.0
        Telling Lies in America (1997)              5.0
        Faster Pussycat! Kill! Kill! (1965)         5.0
        Year of the Horse (1997)                    5.0
        Mina Tannenbaum (1994)                      5.0
        Maya Lin: A Strong Clear Vision (1994)      5.0
        Nico Icon (1995)                            5.0
```

```
Umbrellas of Cherbourg,
The (Parapluies de Cherbourg, Les) (1964)      5.0
Everest (1998)                                 5.0
Heaven's Prisoners (1996)                       5.0
Wedding Gift, The (1994)                        5.0
Horseman on the Roof,
The (Hussard sur le toit, Le) (1995)           5.0
Grace of My Heart (1996)                        5.0
Someone Else's America (1995)                   5.0
Don't Be a Menace to South Central While
Drinking Your Juice in the Hood (1996)         5.0
Stripes (1981)                                 5.0
```