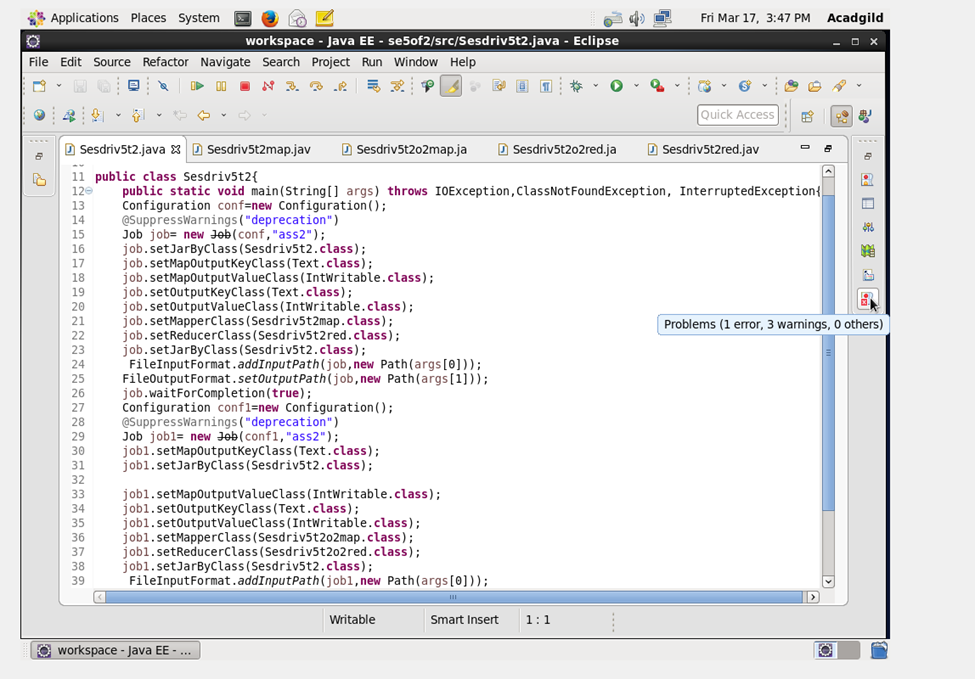
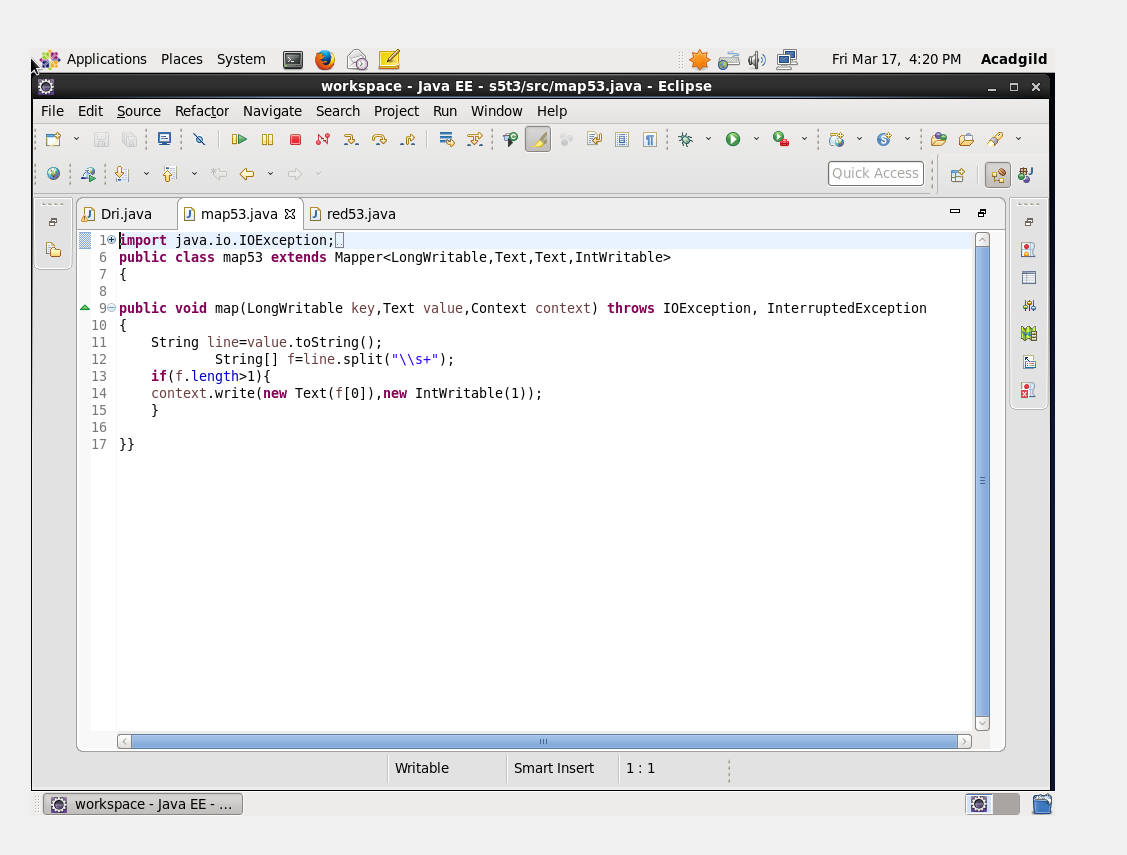
**ASS-5.3**

1. Map reduce program for counting number of ratings given by each user.

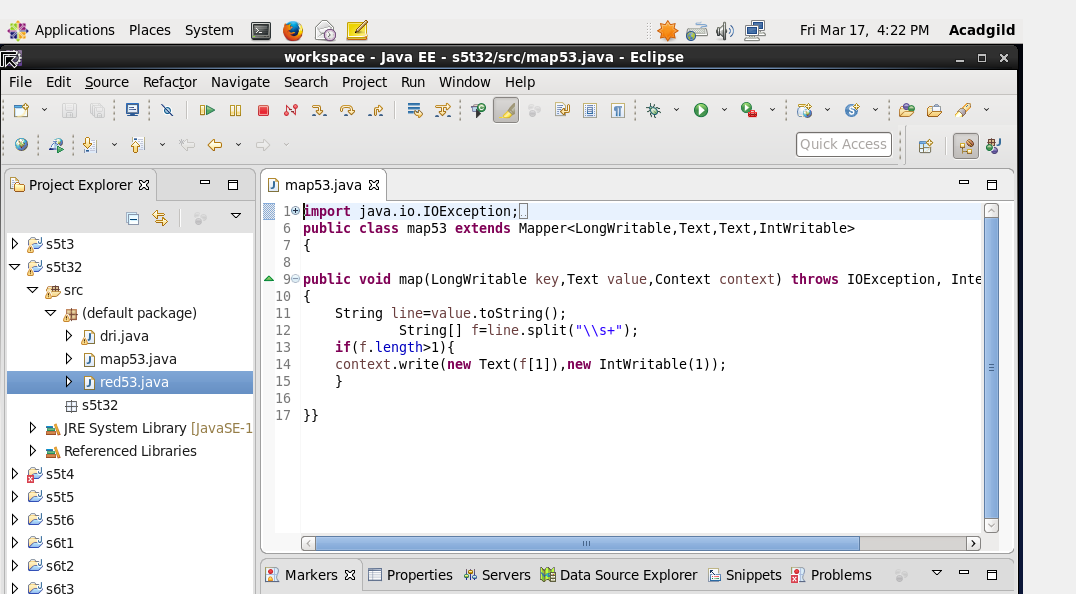
DRIVER CLASS:

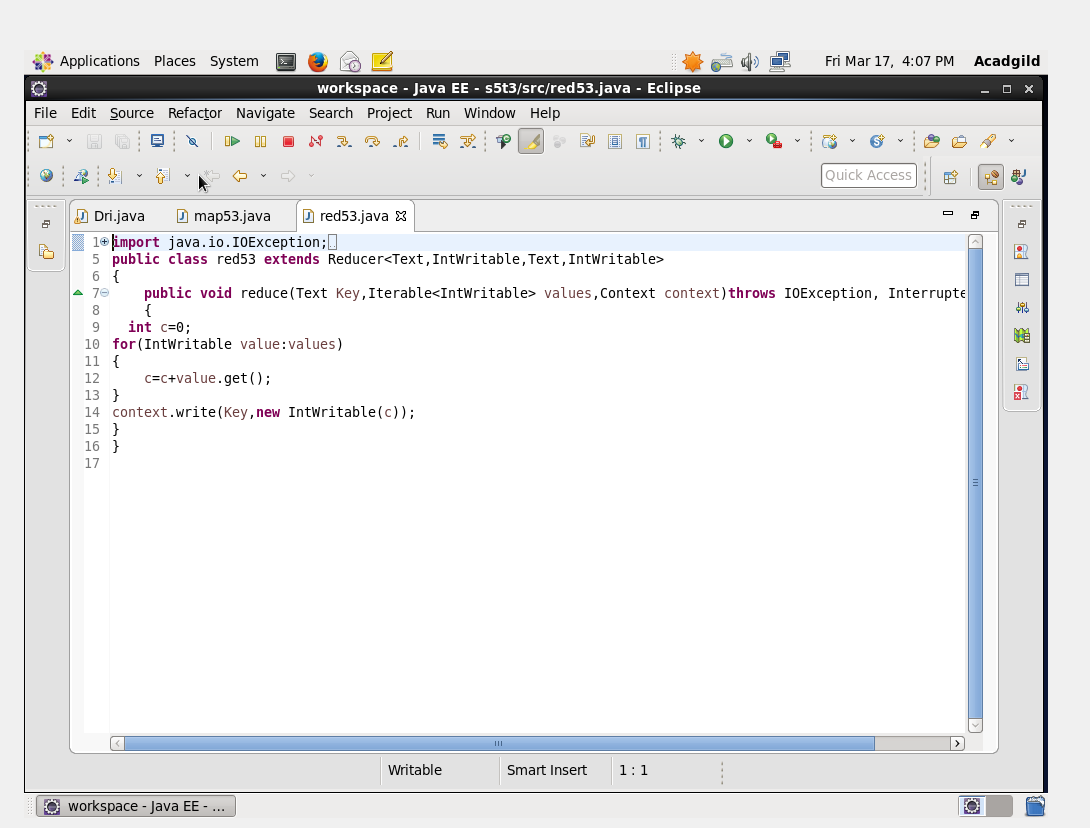


MAPPER CLASS OF TASK 1:

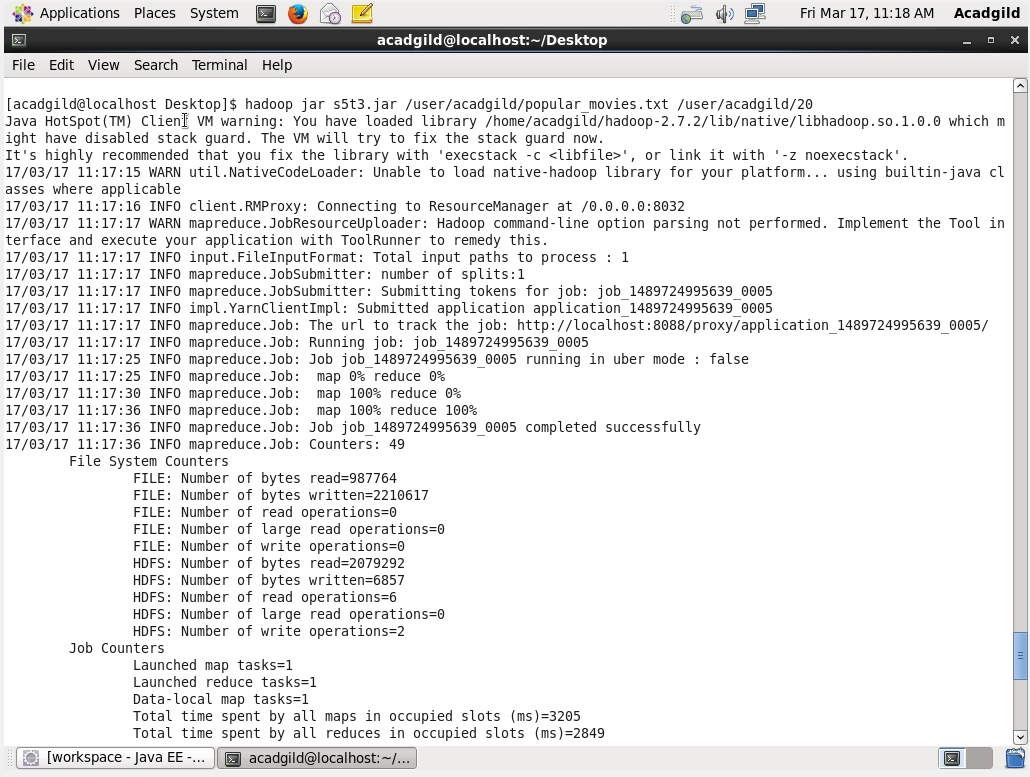


1. MAPPER CLASS OF TASK 2 :Map reduce program for counting number of ratings received by each movie

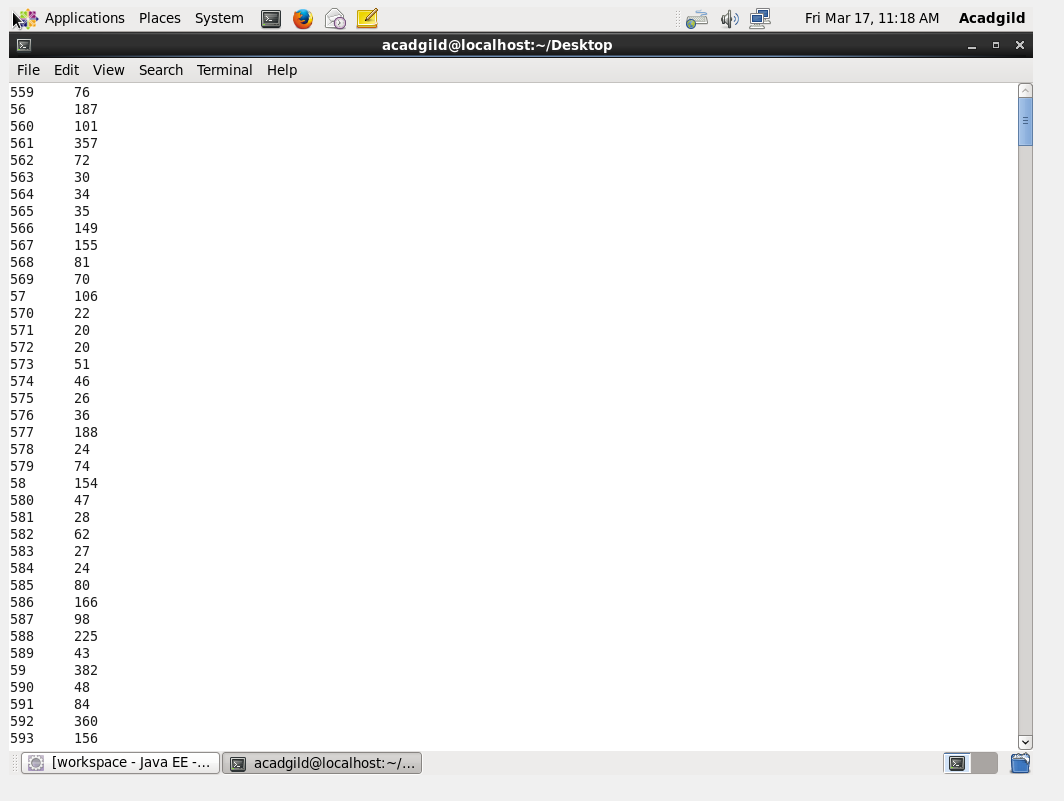


REDUCER CLASS: 

OUTPUT RUN TERMINAL:



OUTPUT FOR TASK 1 : counting number of ratings given by each user.



OUTPUT FOR TASK 2: number of ratings received by each movie

