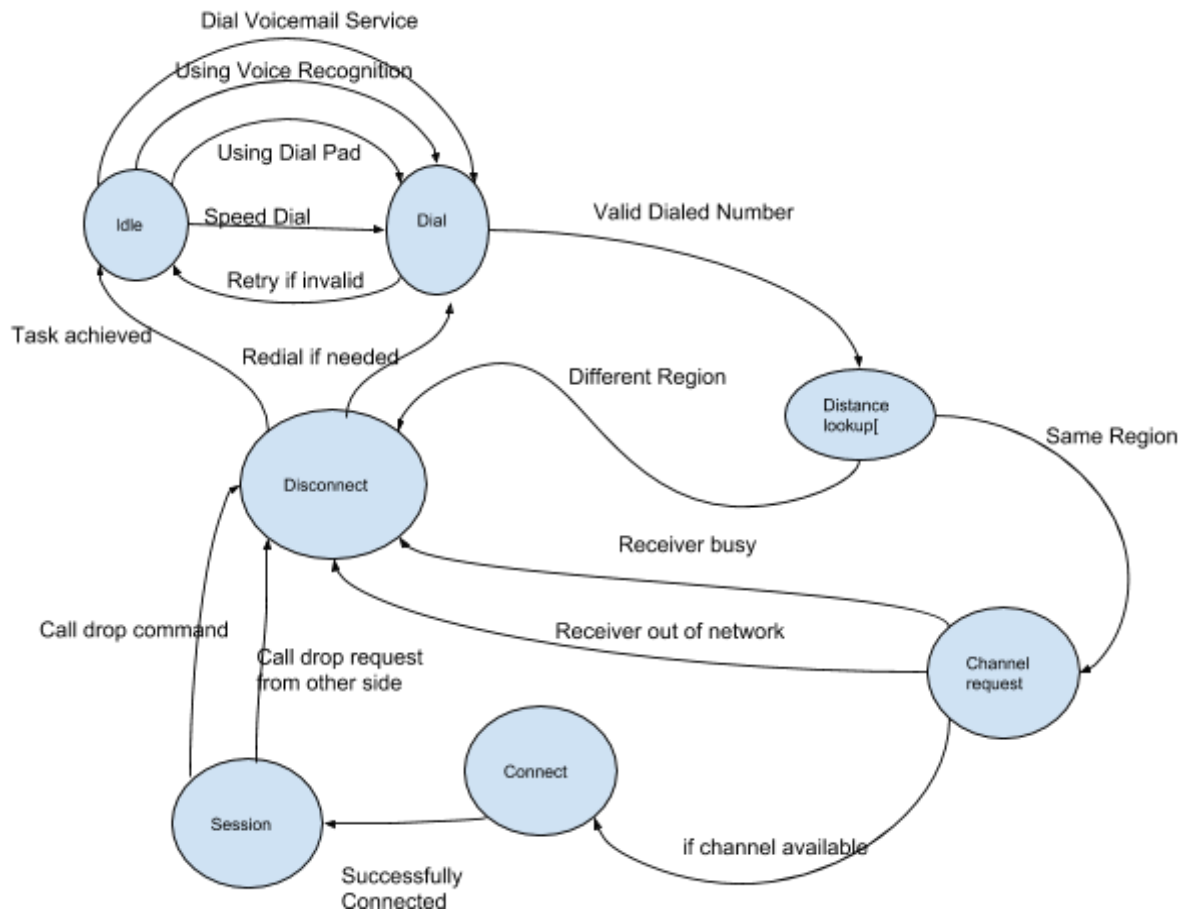


Finite State Machines for the following:

1. Handle outgoing calls using number keypad/verbal/speed dialing methods



1. Dial voicemail service
Expected Result: Voicemail service offers missed voicemails
2. Recognize speech and dial requested number
Expected Result: Given contact number is dialed if valid
3. Dialed using keypad
Expected Result: Given contact number is dialed if valid
4. Dialed through speed contact
Expected Result: Given contact number is dialed if valid
5. Invalid number dialed
Expected Result: Prompt back for retry
6. Valid number dialed
Expected Result: Request region of both devices
7. Same region
Expected Result: Request communication channels from base station
8. Different region

Expected Result: Disconnect the call

9. Receiver busy
Expected Result: Disconnect the call

10. Receiver out of network
Expected Result: Disconnect the call

11. Receiver available
Expected Result: Occupy offered channel

12. Successful connection
Expected Result: Initiate session

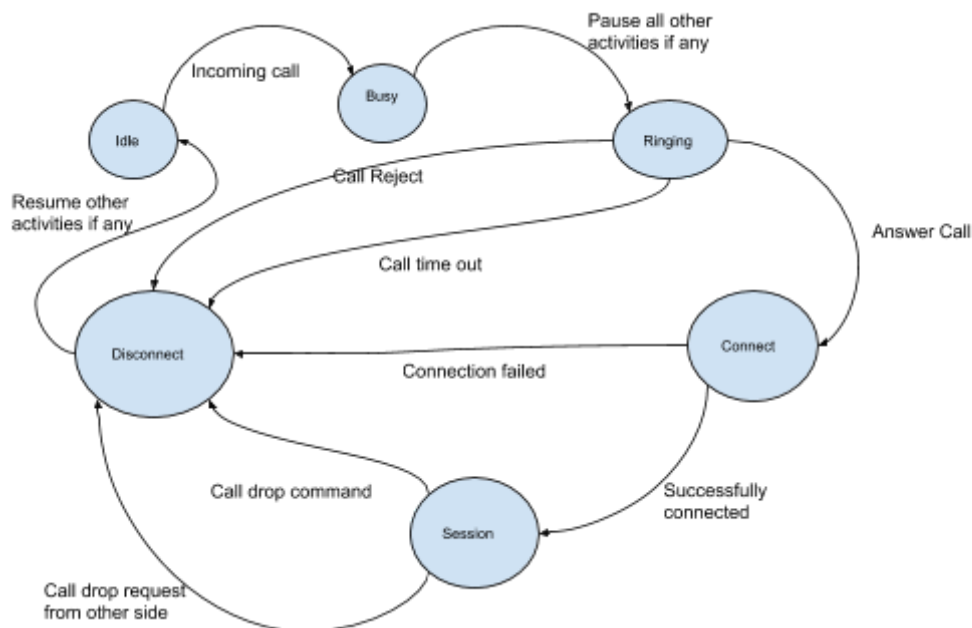
13. Call drop request from receiver side
Expected Result: Disconnect the call

14. Drop the call
Expected Result: Disconnect the call

15. Successful termination of the call
Expected Result: Cell state updated back to idle state

16. Unsuccessful termination of the call
Expected Result: Redial the contact number

2. Handle incoming call



1. Incoming call request arrives
Expected Result: Update cell state to busy

2. Ring the cell
Expected Result: Start ringing until incoming call gets responded or time out occurs

3. Answer the incoming call

Expected Result: Attempt to connect to network channel

4. Call Rejected

Expected Result: Release occupied channels if any

5. Call Timed Out

Expected Result: Release occupied channels if any

6. Connection Failed

Expected Result: Release occupied channels if any

7. Connection Established

Expected Result: Occupy the channel offered by local base station

8. Call drop request from receiver side

Expected Result: Disconnect the call

9. Drop the call

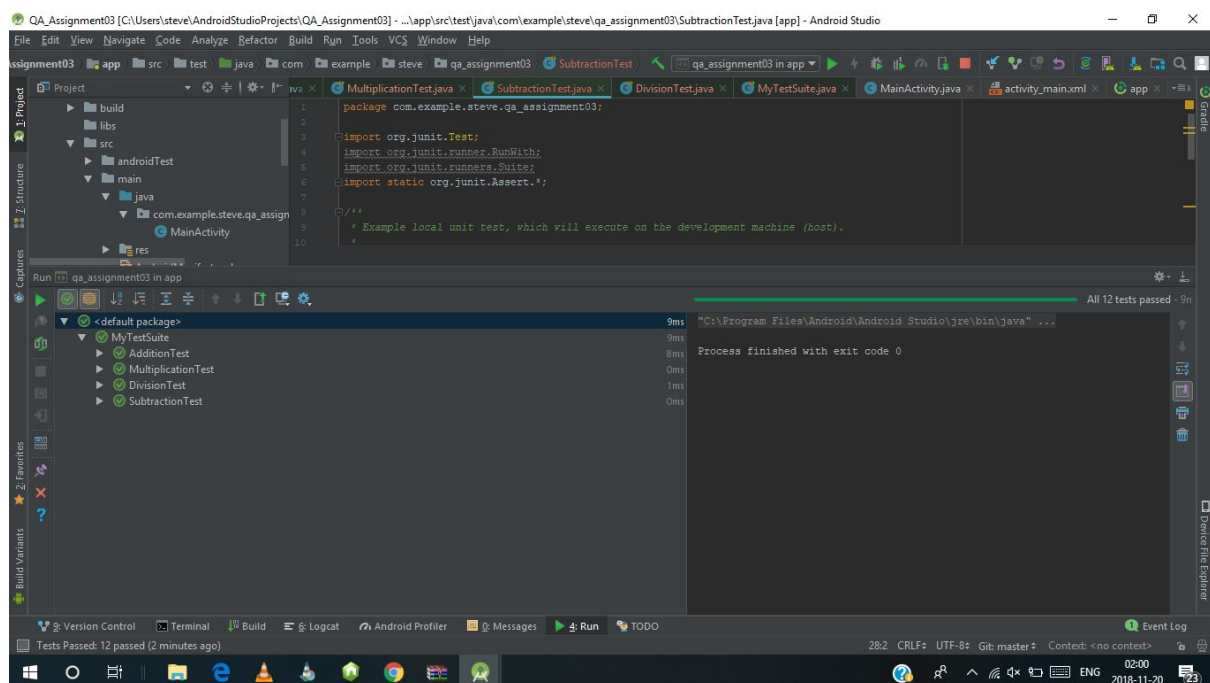
Expected Result: Disconnect the call

10. Successful termination of the call

Expected Result: Cell state updated back to idle state

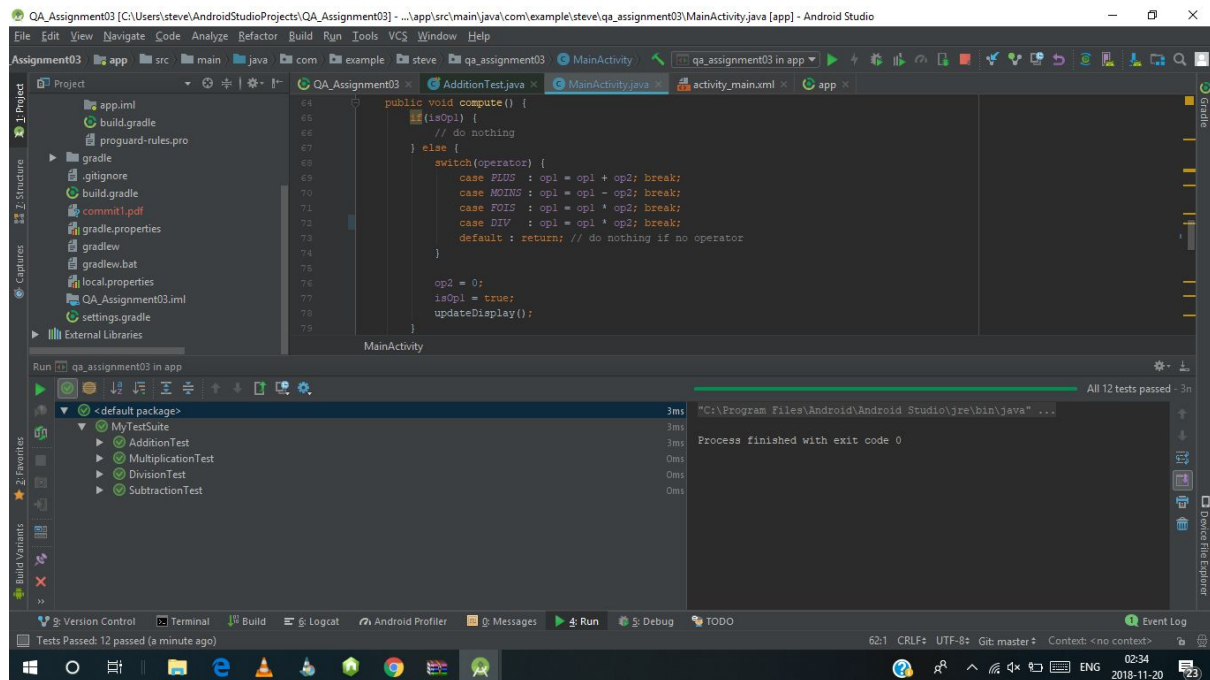
Question 2:

- 1.
- 2.
3. Screenshot of the Test cases: Test passed



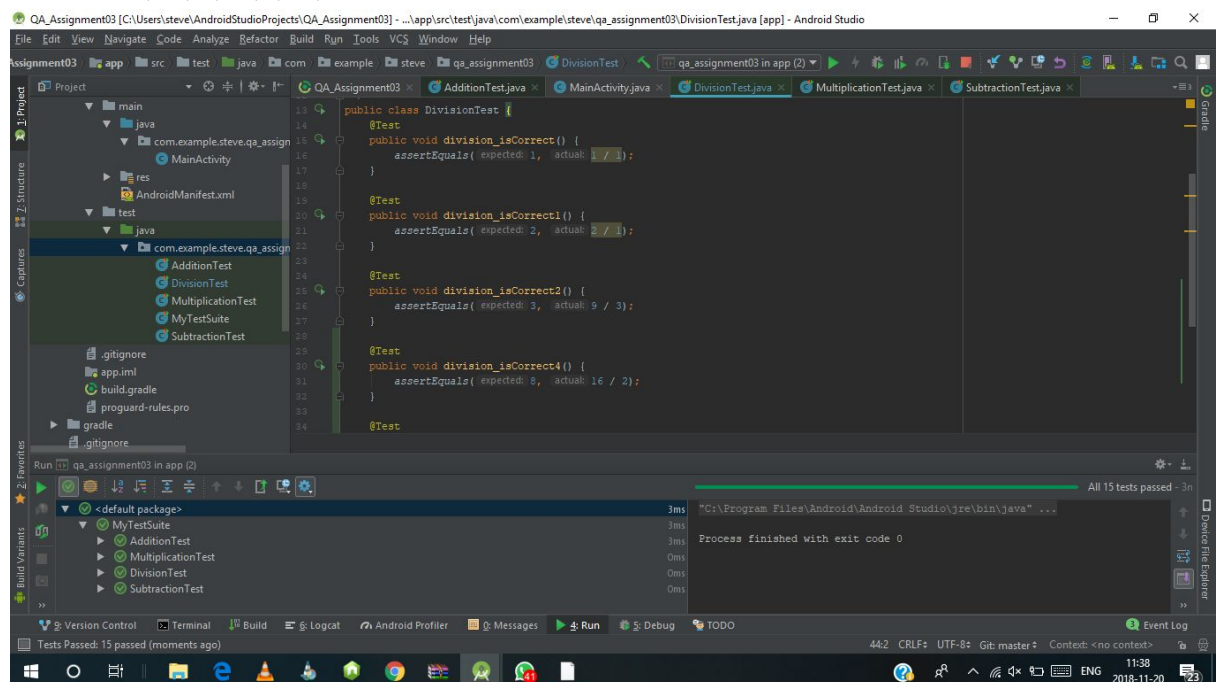
4. Create mutant
Change division into multiplication

5. Re-run of the Test



6. The result of unit test was pass.

7. argument (1,1), (2,1),(9,3)



8. The result of the unit test in this was pass. It tell us us that the test case we implement was not strong enough to detect the change in the program .
In conclusion we need to change the test case and implement something better that will detect and fail the mutant.

commit

The screenshot shows a web browser displaying the GitHub repository page for 'Chedom13 / Assignment3'. The URL in the address bar is 'https://github.com/Chedom13/Assignment3/commits/master'. The page header includes navigation links for Pull requests, Issues, Marketplace, and Explore. Below the repository name, there are buttons for Watch (0), Star (0), and Fork (0). The main content area shows the commit history for the 'master' branch, filtered for 'Commits on Nov 20, 2018'. The list of commits is as follows:

Commit Message	Author	Time Ago	Commit Hash	Diff View
update doc	Chedom13	committed a minute ago	0896595	Diff
update code	Chedom13	committed 2 minutes ago	73c3376	Diff
update code	Chedom13	committed 9 hours ago	58dee65	Diff
update code	Chedom13	committed 9 hours ago	bf7ee40	Diff
update	Chedom13	committed 11 hours ago	dbb1a37	Diff

At the bottom of the commit list, there are 'Newer' and 'Older' buttons. The Windows taskbar at the bottom of the screen shows the time as 11:57 on 2018-11-20.