

Test Name	Test Goal	Expected Outcome
PlannerLevel1Test. testAddTopic()	Verify that add topic to the topics list is work correctly.	if the topic is new it added to the list and if it exist before throw an Exception.
PlannerLevel1Test. testDeleteTopic()	Verify that delete topic from the topics list is work correctly.	If the topic is found it deleted if not no topic is deleted.
PlannerLevel1Test. testGenerateStudyPlan()	Verify that Generate Study Plan is Generate the correct study plan.	If there is no topics in the topics list the method should throw an Exception else it should generates a list as in the order the topics inserted for each topic study one block of it and repeat until finish.
PlannerLevel2Test. testAddCalendarEvent()	Verify that add event to the events list is work correctly.	If the event is overlap with another event the method should throw an exception if not the event should add to the list.
PlannerLevel2Test. testSaveData()	Verify that saving the Planner data is work correctly.	When the method is called with OutputStream object of a file the method should save the planner data to that file in specific format.
PlannerLevel2Test. testLoadData()	Verify that loading the Planner data from a given InputStream is work correctly.	When the method is called with InputStream object of a file the method should load the planner data from that file in specific format.
PlannerLevel3Test. testGenerateStudyPlanWithBreaks()	Verify that Generate Study Plan is Generate the correct study plan with breaks.	The planner should generate study plan with a break between each study block if it not overlapping with the end of the day or any event.
PlannerLevel3Test. testGenerateStudyPlanWithEvents()	Verify that Generate Study Plan is Generate the correct study plan when there is one event or more.	The planner should generate study plan that for each block of study not overlapping with any event.
PlannerLevel3Test. testSetTargetEventForTopic()	Verify that set target event for the topics is work correctly.	if the event is of Exam or Essay Type it should be set as a target if not the method should throw an Exception.

The File Format Used For Saving The Planner Data Is As The Following :-

1. Block Of Study Length (Integer)
2. Break Length (Integer)
3. Start Day Time (Long)
4. End Day Time (Long)
5. Topics List Size (Integer)
6. For Each Topic :
 - 1- Subject (String)
 - 2- Duration (Integer)
 - 3- Boolean Telling that is there is a target event or not (Boolean)
 - 4- If true save the event as the same way the events is saving "As Below"
7. Calendar Events List Size (Integer)
8. For Each Event :
 - 1- Name (String)
 - 2- Time (Long)
 - 3- Duration (Integer)
 - 4- Type (String)
9. Plan List Size (Integer)
10. For Each Block Of Study :
 - 1- Topic Name (String)
 - 2- Time (Long)
 - 3- Duration (Integer)

*This Format is easy to write and read the data back to the planner.