Exercise 6

Exercise 1

Insert the method boolean isAlive() in interaface Soldier

Implement this method in others classes.

Model the battle of Montgisard between Baldwin IV of Jerusalem and Saladin

Saladin: 26 000 soldiers with 10000 spearmen, 6000 swordmen, 5000 horsemen and 5000 archers

Baldwin IV: 30 000 soldiers with 12000 spearmen, 7000 swordmen, 7000 horsemen and 4000 archers.

Visitor

Exercise 2

Implement the method for

- (a) Check whether the army is alive (compare with the exercise 1)
- (b) Display members of an army
- (c) Count the number of infantrymen and horsemen in an army
- (d) Count the number of soldier with the life less than 10 (can be moved to the hospital).

Observer

Exercise 3

Using the observer to implement the method for

- (a) Display the total number of dead soldiers during the battle
- (b) Move the soldier with blood less than 20 to hospital and print the notification message.
- (c) After 4 rounds, the army 1 is supported by the new army of 1000 spearmen, 1000 horsemen, 500 archers