

2. The bug in the EventRegistration.sol file is in:

```
modifier soldOut() {  
    require (numTicketsSold < ticketQuota);  
    _;  
}
```

If it is so-called “soldOut”, the code should be written as

```
modifier soldOut() {  
    require (numTicketsSold = ticketQuota);  
    _;  
}
```

Which means the total number of sold tickets reaches the ticket quota.

3.

It initials the EventRegistration instance with 100 tickets quotas and ticket price is \$10 each. First, it tests buyTickets() function by using [test1@test.com](mailto:test1@test.com) as email buying 50 tickets, which causes a contract with value 500 from accounts[1]. Then it calls numTicketSold to check how many tickets has been sold and testing whether the number of sold tickets is equal to 50. Second, it uses buyTickets() function to purchase 41 tickets(\$410 in sum) from [test1@test.com](mailto:test1@test.com), the same account as the first step. Since that the account doesn't have enough money for the second purchase, the transaction should not succeed. The tickets should not be sold this time. Finally, it checks the total number of sold tickets whether it equals to 60 or not.