

- Direct to home (D2H) operator SatTV wants you to design a mini software system for its customers.
- SatTV offers multiple predefined channel packages (called as base packs henceforth) and multiple services. Base packs available to purchase are Gold and Silver which comes with certain channels.
- User has an initial balance of 100 Rs. in his account.
- Whenever the base pack is subscribed, the base package price will be deducted from the account balance.
- User will receive a 10% discount on the base pack amount if the duration is at least 3 months.
- User can add the individual channel into the current subscription on which amount will be deducted from the account balance.
- In addition to offering TV channels, SatTV also offers multiple special optional services - Learn English Service and Learn Cooking service.
- If any of the services are purchased by the user, the corresponding amount will be deducted from the balance.
- Whenever user subscribes to any package or service, notifications should be sent through email and SMS if the user has updated his email and phone number.

### Notes:

1. *We don't expect from you to develop real Email and SMS notification features. You can just show the message on the console that Email and SMS are sent successfully.*
2. *The list of packages, channels and prices are shown directly in sample inputs.*

### Sample Inputs

**Note:** *To save space, we haven't shown the input options every time after the processing is complete for the last selected option. Although you can show them if you would like :-)*

### Welcome to SatTV

1. View current balance in the account
2. Recharge Account
3. View available packs, channels and services
4. Subscribe to base packs
5. Add channels to an existing subscription
6. Subscribe to special services
7. View current subscription details
8. Update email and phone number for notifications
9. Exit

**Please create your project/solution in such a way that we should be able to run it in IDE out of the box without any efforts.**

**Enter the option: 1**

View current balance in the account

Current balance is 100 Rs.

===== {Here you can show all the options each time if you'd like} =====

**Enter the option: 2**

Enter the amount to recharge: 500

Recharge completed successfully. Current balance is 600

=====

**Enter the option: 3****View available packs, channels and services****Available packs for subscription**

Silver pack: Zee, Sony, Star Plus: 50 Rs.

Gold Pack: Zee, Sony, Star Plus, Discovery, NatGeo: 100 Rs.

**Available channels for subscription**

Zee: 10 Rs.

Sony: 15 Rs.

Star Plus: 20 Rs.

Discovery: 10 Rs.

NatGeo: 20 Rs.

**Available services for subscription**

LearnEnglish Service: 200 Rs.

LearnCooking Service: 100 Rs.

=====

**Enter the option: 4****Subscribe to channel packs**

Enter the Pack you wish to subscribe: (Silver: 'S', Gold: 'G'): G

Enter the months: 3

You have successfully subscribed the following packs - Gold

Monthly price: 100 Rs.

No of months: 3

Subscription Amount: 300 Rs.

Discount applied: 30 Rs.

Final Price after discount: 270 Rs.

Account balance: 330 Rs.

Email notification sent successfully

SMS notification sent successfully

=====

**Please create your project/solution in such a way that we should be able to run it in IDE out of the box without any efforts.**

**Enter the option: 5**

**Add channels to existing subscription**

Enter channel names to add (separated by commas): Discovery, Nat Geo

Channels added successfully.

Account balance: 300 Rs.

=====

**Enter the option: 6**

**Subscribe to special services**

Enter the service name: LearnEnglish

Service subscribed successfully

Account balance: 100 Rs.

Email notification sent successfully

SMS notification sent successfully

=====

**Enter the option: 7**

View current subscription details

Currently subscribed packs and channels: Gold + Discovery + Nat Geo

Currently subscribed services: LearnEnglish.

=====

**Enter the option: 8**

Update email and phone number for notifications

Enter the email: john@example.com

Enter phone: 9999999999

Email and Phone updated successfully

### **Some Instructions/Guidelines**

1. Develop a simple command-line application.
2. Write object-oriented code.
3. Write simple enough code which is easy to understand.
4. Avoid writing too many lines of production code.
5. Include test cases.
6. Avoid using any framework except testing/mocking frameworks.
7. Include all the dependencies with your solution.
8. Include instructions with your solution if needed.

*Please do not hesitate to reach out to us if you have any query about any of the above points :)*

**Please create your project/solution in such a way that we should be able to run it in IDE out of the box without any efforts.**