## **Investment Earning**

- Enter the buying price per share.
- Enter the closing price on the subsequent days.
- Calculate aggregate earnings/losses after each day.
- Exit the program when the closing price is negative.

# **Budget Allocation**

- Enter your budget
- Enter the proportion of each expense item
- Ignore further items if proportion exceeds 100%
- Use arraylist to store expense properties
- Find the amount for each item

## Average Stock Price

- Create a Stock class
- Record buying and selling of stock
- Update share capital
- Update the average price of the stock

## Select Students

- Determine who are above 15 years to receive vaccine
- Enter the number of students
- Input student name and age
- Use arrays

# Grade Point Average System

- Create a Student class
- For Student object, store the subject and grades with arraylist

- Find the GPA of the Student
- A = 4.0 B = 3.0 C = 2.0 D = 1.0 F = 0.0

#### Vehicle Insurance

- Premium depends on vehicle type
  - Car, truck, bus, motorcycle
- Three types of motorcycle
  - Low, medium, high
- Use nested switch case approach

#### Roster Table

- Create a arraylist of arraylists
- Put names for a day in arraylist
- Put a number of arraylists for the days into arraylist
- Get days of duty for a person

#### Bank Account With Transfer

- Create a BankAccount object.
- BankAccount should have save and withdraw
- It can transfer money to other account

### Restaurant Bill

- Create Bill Object
- A bill contains ordered food, quantity and price
- Get order and total cost of the bill
- Use arraylist to record the order

### **Train Ticket Machine**

- Set location, indicate adult, state, number of tickets
- Get total price of purchase
- Use enum and switch case

# **Bag Sales System**

- Create a bag class, an abstract class
- Create concrete PaperBag and PlasticBag class from Bag
- Set the selling price according to size, materials and tax.

# Solar Toy Car

- Create ToyCar Class
- Create SolarPanel interface
- Create SolarToyCar Class from ToyCar Class and SolarPanel interface
- SolarToyCar has own charging approach
- SolarToyCar instance works by solar energy directly