

Practical 4 – Week 4

Array, ArrayList & Wrapper Class

1. Write a program that adds ten random integers to an ArrayList and prints four lines of output, containing
 - Every element at an even index.
 - Every even element.
 - All elements in reverse order.
 - Only the first and last element.
2. Download the `Stock` class from Blackboard, write a program that prompts the user to enter the symbol, name, opening price and market price of a stock. The prompt will continue until user enters “quit” for the symbol input. The stocks entered will be stored in an ArrayList before being displayed on the screen.

```
Enter symbol: ORCL
Enter name: ORACLE
Enter opening price (S$): 34.5
Enter market price (S$): 34.35

Enter symbol: CPTL
Enter name: CAPITAL LAND
Enter opening price (S$): 2.69
Enter market price (S$): 2.7
Enter symbol: QUIT

ORCL,ORACLE
A drop of 0.435 percent
CPTL,CAPITAL LAND
An increase of 0.372 percent
Good Bye!
```

Optional

3. Design a class `Message` that models an e-mail message. A message has a recipient, a sender, and a message text. Support the following methods:
 - A constructor that takes the sender and recipient
 - A method, `append`, that appends a line of text to the message body
 - A method, `toString`, that makes the message into one long string like this: "From: Harry Morgan\nTo: Rudolf Reindeer\n..."Write a program that uses this class to make a message and print it.

-- End --