

## Assignment 1

### Brew Coffee shop

Implement this program with the data structure you already learned (array, linked list, hash table, and/or binary tree).

```
=====
+++++ Brew Coffee Shop +++++
Welcome, Mr./Mrs. Asd
=====
```

No.	Menu	Type	Quantity	Price
1	Americano	Coffee	24	19000
2	Chocolate Baked	Non-coffee	15	24000
3	Alberto	Coffee	7	44000

```
=====
```

- We will have 2 roles, first is **customer** and **admin**
- For **customer** menu:

```
=====
```

No.	Menu	Type	Quantity	Price
1	Americano	Coffee	24	19000
2	Chocolate Baked	Non-coffee	15	24000
3	Alberto	Coffee	7	44000

```
=====
1. Buy item
2. Cancel item
3. Exit
Enter your action: 
```

- 1. Buy item
  - o Input only the available number
  - o Cannot input quantity more than each item quantity

```
=====
```

No.	Menu	Type	Quantity	Price
1	Americano	Coffee	24	19000
2	Chocolate Baked	Non-coffee	15	24000
3	Alberto	Coffee	7	44000

```
=====
choose your menu [1 - 3]: 1
enter the quantity [1 - 24]: 12
```

- o You must decrease the quantity for the selected item and the price is calculated from price \* quantity

```
=====
```

No.	Menu	Type	Quantity	Price
1	Americano	Coffee	12	19000
2	Chocolate Baked	Non-coffee	15	24000
3	Alberto	Coffee	7	44000

```
=====
1. Buy item
2. Cancel item
3. Exit

your order :
=====
```

No.	Menu	Type	Quantity	Total Price
1	Americano	Coffee	12	228000

```
=====
```

- 2. Cancel Item is just deleting all of your order (pop all)
- 3. Exit
- For **Admin** menu:

```
=====
+++++ Brew Coffee Shop +++++
Welcome, Mr./Mrs. Admin

=====
No. | Menu | Type | Quantity | Price |
-----
1 | Americano | Coffee | 24 | 19000 |
2 | Chocolate Baked | Non-coffee | 15 | 24000 |
3 | Alberto | Coffee | 7 | 44000 |
-----
1. Add item
2. Remove item
3. Exit
Enter your action: █
```

- 1. Add item
  - o Length of name should be more than 5 and less than 20
  - o Type of coffee only “yes” or “no” answer
  - o Quantity >1 and <100
  - o Price >10000 and < 200000

```
Insert item name: Vanilla
Type of Coffee[yes/no]: no
Insert the quantity of the item: 12
Insert the price of the item: 20000█
```

```
=====
No. | Menu | Type | Quantity | Price |
-----
1 | Americano | Coffee | 24 | 19000 |
2 | Chocolate Baked | Non-coffee | 15 | 24000 |
3 | Alberto | Coffee | 7 | 44000 |
4 | Vanilla | Non-coffee | 12 | 20000 |
-----
1. Add item
2. Remove item
3. Exit
Enter your action: █
```

- 2. Remove item

```
=====
No. | Menu | Type | Quantity | Price |
-----
1 | Americano | Coffee | 24 | 19000 |
2 | Chocolate Baked | Non-coffee | 15 | 24000 |
3 | Alberto | Coffee | 7 | 44000 |
4 | Vanilla | Non-coffee | 12 | 20000 |
-----
1. Add item
2. Remove item
3. Exit
```

- Only can choose the available number

No.	Menu	Type	Quantity	Price
1	Americano	Coffee	24	19000
2	Alberto	Coffee	7	44000
3	Vanilla	Non-coffee	12	20000
1. Add item				
2. Remove item				
3. Exit				