



# **Programming Fundamentals**

## **Course Work 03**

## Introduction

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This program is designed to generate the output for an **Online Book Shop Billing System**. It requires the user to enter their data into the program. The program will then display the formatted bill output with the provided information.

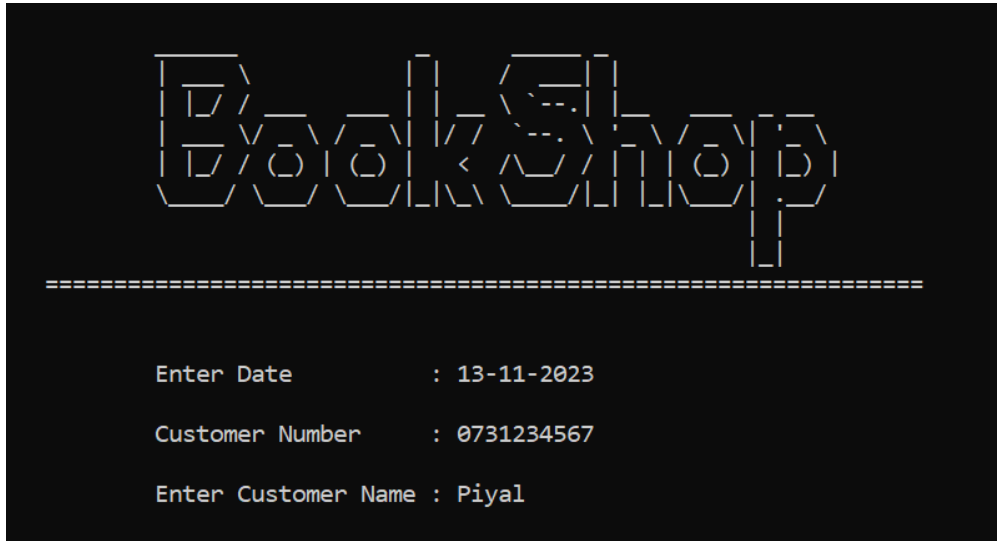
## Instructions

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### Prices of Items:

Item	Unit Price
CR Book	Rs.80.00
Pen	Rs.20.00
Pencil	Rs.15.00
Eraser	Rs.10.00
Glue	Rs.40.00
Pencil Box	Rs.100.00
Water Bottle	Rs.230.00
Lunch Box	Rs.250.00
Calculator	Rs.250.00
School Bag	Rs.1000.00
Ruler	Rs.10.00
Highlighter	Rs.50.00
Cardboard File	Rs.25.00

1. Firstly, the user should be displayed with the following as shown below. The user is required to enter the date, a valid contact number and their name. Use the following format for the date: DD-MM-YYYY. (Example: 31-12-2021).



```

BookStop
=====

Enter Date      : 13-11-2023

Customer Number : 0731234567

Enter Customer Name : Piya1

```

2. The School Items section will be displayed to the user as follows.  
The user will then enter the required quantity for each item.



```

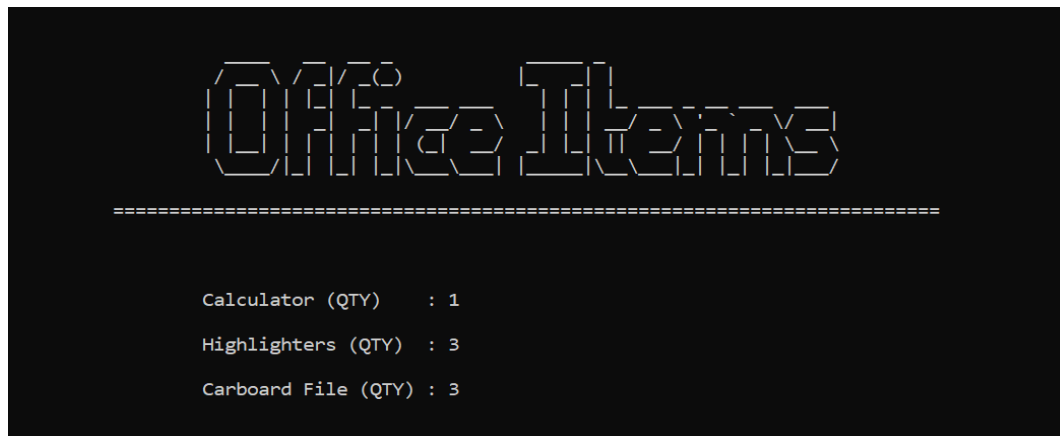
School Items
=====

CR Book (QTY)      : 5
Pen (QTY)          : 4
Pencil (QTY)       : 3
Eraser (QTY)       : 2
Pencil Box (QTY)   : 1
Glue Bottle (QTY)  : 2
Ruler-(MEDIUM) (QTY) : 2

```

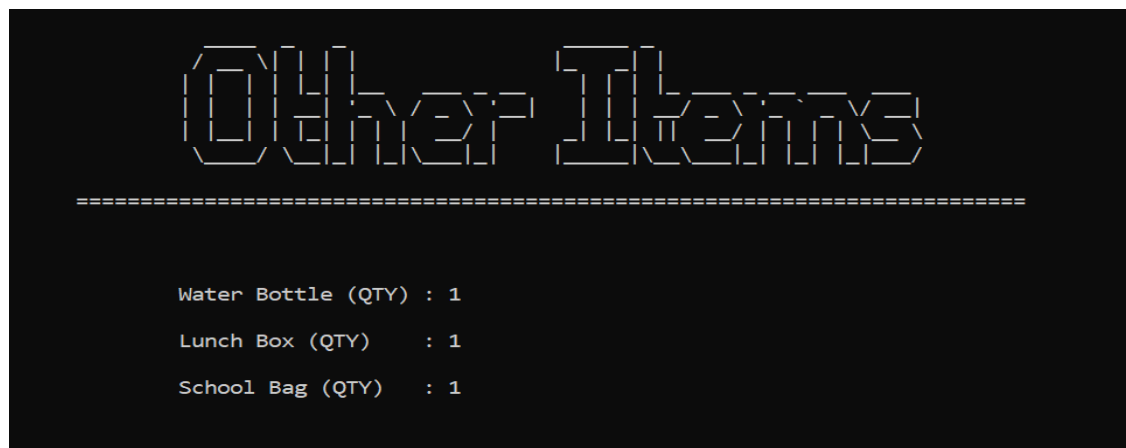
3. The Office Items will be displayed to the user as shown below.

The user will then enter the required quantity for each item.



4. The Other Extra Items will be displayed to the user as shown below.

The user will then enter the required quantity for each item.



5. Once the user completes the above steps, the program should calculate the user's total amount and the bill will be displayed as follows.

Please keep in mind that the total will be discounted by 10%.

6. The user is then required to enter the paying amount.

BookShop			
Tel : 0731234567		Date :13-11-2023	
Name : Piyal			
Items	QTY	Unit Price	Price
CR Book	5	80.00	400.00
Pen	4	20.00	80.00
Pencil	3	15.00	45.00
Erasers	2	10.00	20.00
Glue	2	40.00	80.00
Pencil Box	1	100.00	100.00
Water Bottle	1	230.00	230.00
Lunch Box	1	250.00	250.00
Calculator	1	250.00	250.00
School Bag	1	1000.00	1000.00
Ruler	2	10.00	20.00
Highlighters	3	50.00	150.00
CardBord File	3	25.00	75.00
Total			3470.00
Discount (10%)			347.00
Price			3123.00

7. The remaining money in this shop should be given by spending the least number of currency notes and least number of coins. Therefore system should calculate that and print given currency notes and coins as shown below.

```

=====
|B|a|l|a|n|c|e|
=====

Enter Customer given amount - 5000

+-----+
| Net Amount | 3123.00 |
+-----+
| Cash       | 5000.00 |
+-----+
| Change     | 1877.00 |
+-----+

+-----+
| Value      | No      |
+-----+
| Rs.5000    | 0       |
+-----+
| Rs.2000    | 0       |
+-----+
| Rs.1000    | 1       |
+-----+
| Rs.500     | 1       |
+-----+
| Rs.200     | 1       |
+-----+
| Rs.100     | 1       |
+-----+
| Rs.50      | 1       |
+-----+
| Rs.20      | 1       |
+-----+
| Coin 10    | 0       |
+-----+
| Coin 5     | 1       |
+-----+
  
```

## Notes

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Submit your java file into LMS (Example.java).

This program uses the Scanner class to handle user input. Ensure that you have the necessary permissions to access the console or command line for input.

Ensure that you enter valid data in the correct format as specified by the program prompts.

Review and understand the program's logic to grasp how the output is generated based on the user's input.

Use these websites for generate the ASCII art and convert to escape characters.

<http://patorjk.com/software/taag/>

<https://www.javaescaper.com/>

Refer this video for get more idea about this course work - [Demo Video](#)