



USER MANUAL

COUPON INVENTORY SYSTEM



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GENERAL GUIDELINES

1. The first step on running the program is to add the coupons to the list and then perform other operations.
2. Once coupons are added/purchased, then once can search and view the coupons in the system.
3. Coupon search is done using both Linear and BST algorithms.
4. The file containing the coupon detail must be a text file.
5. The order for a coupon written in a file must be as follow- Coupon Provider, Coupon Product it is applied, Product Price, Coupon Discount Rate, Coupon expiry period, coupon status (redeemed/unused) and final price.
6. Final Price is the price of the product after applying the discount rate to it.
7. The unsorted and sorted coupon list created in the program is created in the directory where the program is being run.

INTRODUCTION

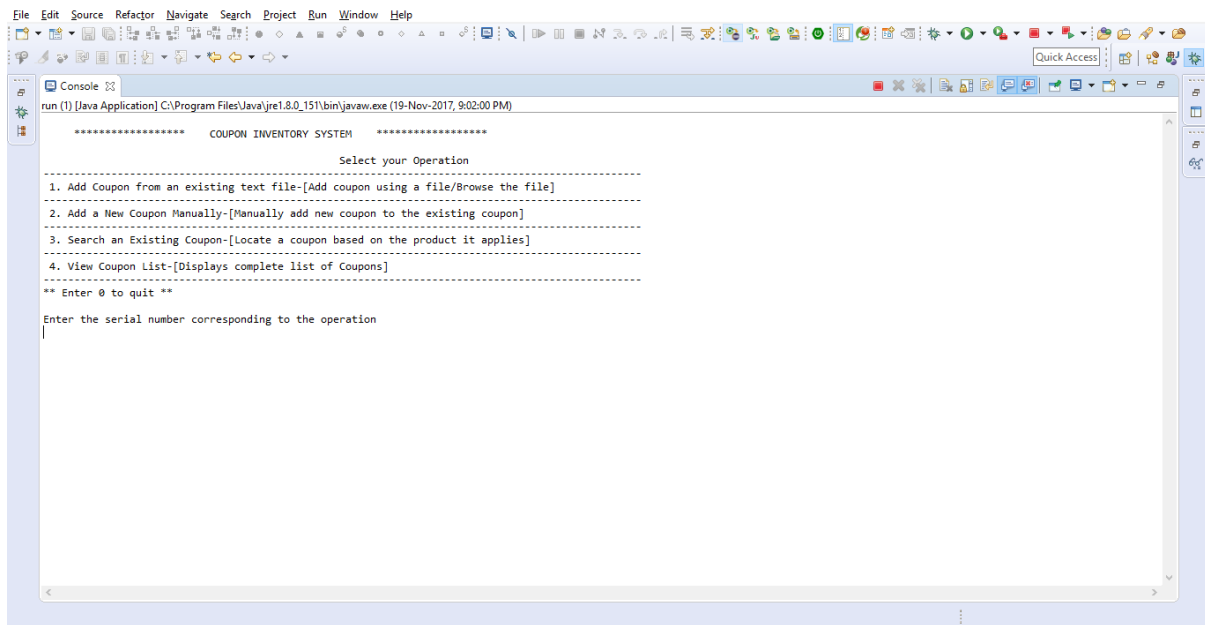
The Coupon Inventory System (CIS) that was developed creates an integrated system to store coupons and perform operations. The code for this program has been written in java. To run the system, there are few java files that needs to be executed on an Integrated Development Environment (IDE). I have used Eclipse IDE, developed by the Eclipse Foundation. There are several other IDE that can be used such as NetBeans, Apache Tomcat, and Linux. You can download Eclipse from <https://www.eclipse.org/downloads/> . You will need an up and running IDE to use this system.

There are various operations that can be performed with the software. Following up with the user manual, you can see that there are steps for each operation.

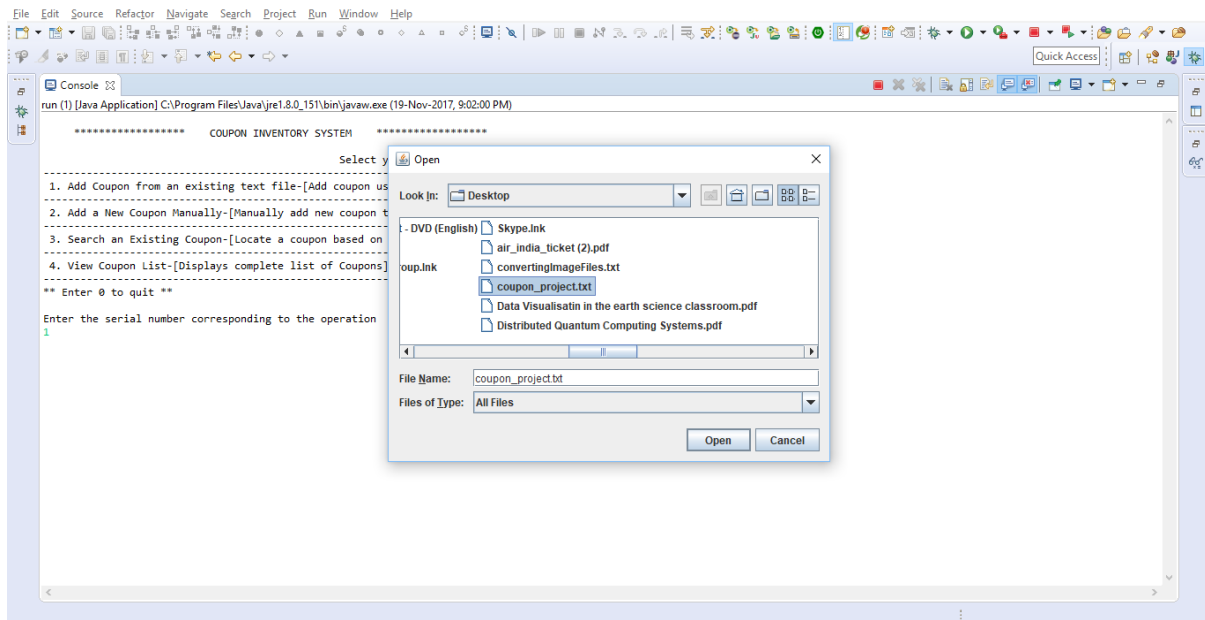
The operations that can be performed are adding coupons from a file, adding coupons manually, searching for a coupon and viewing coupon.

ADDING A COUPON – FILES

Step 1: Execute the run.java file.



Step 2: From the menu display, enter 1 to add coupons from file. There is a dialog box that opens. Select and open the text file that has coupon details in the order as- Coupon Provider, Coupon Product, Product Price, Coupon Discount Rate, Coupon Validity period, and Coupon Status (used/unused).



Step 3: It outputs that the number of coupons added to the list

```
File Edit Source Refactor Navigate Search Project Run Window Help
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:02:00 PM)

***** COUPON INVENTORY SYSTEM *****

Select your Operation

-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
1
32 coupons added from the file to the list.

***** COUPON INVENTORY SYSTEM *****

Select your Operation

-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
```

Step 4: To Quit press 0

```
File Edit Source Refactor Navigate Search Project Run Window Help
<terminated> run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:02:00 PM)

Select your Operation

-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
1
32 coupons added from the file to the list.

***** COUPON INVENTORY SYSTEM *****

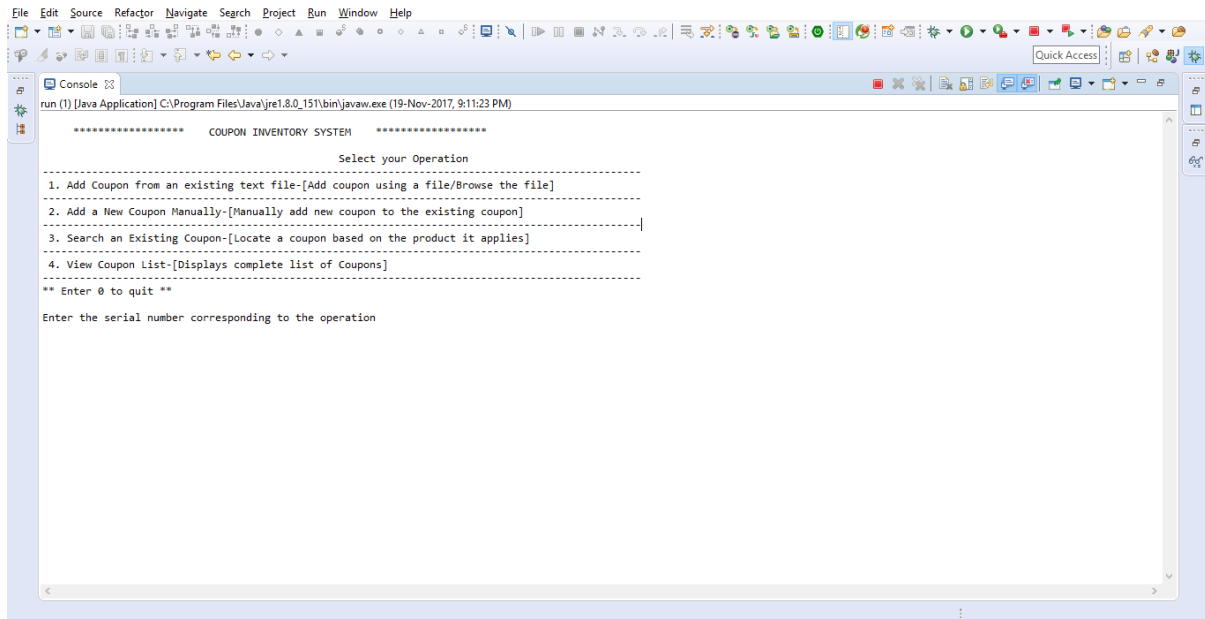
Select your Operation

-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
0
#### Ending the Program ####
```

ADDING COUPON- MANUALLY

Step 1: Run run.java as performed while adding file.



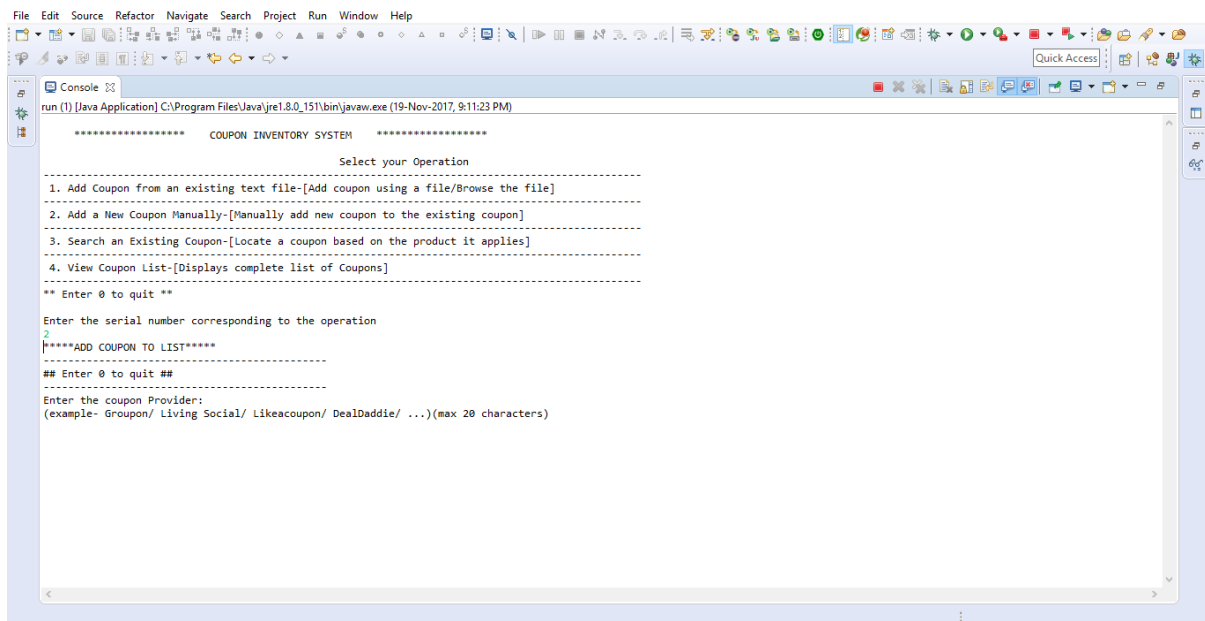
```
File Edit Source Refactor Navigate Search Project Run Window Help
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:11:23 PM)

***** COUPON INVENTORY SYSTEM *****

Select your Operation
-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
```

Step 2: Enter 2 for adding coupons manually



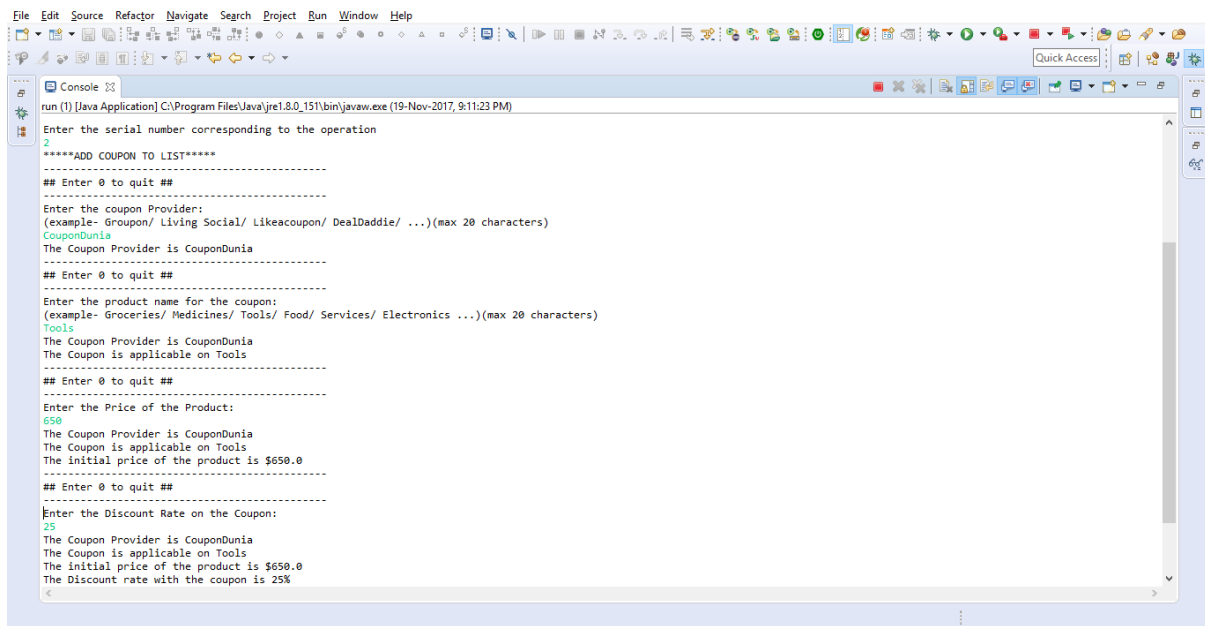
```
File Edit Source Refactor Navigate Search Project Run Window Help
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:11:23 PM)

***** COUPON INVENTORY SYSTEM *****

Select your Operation
-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

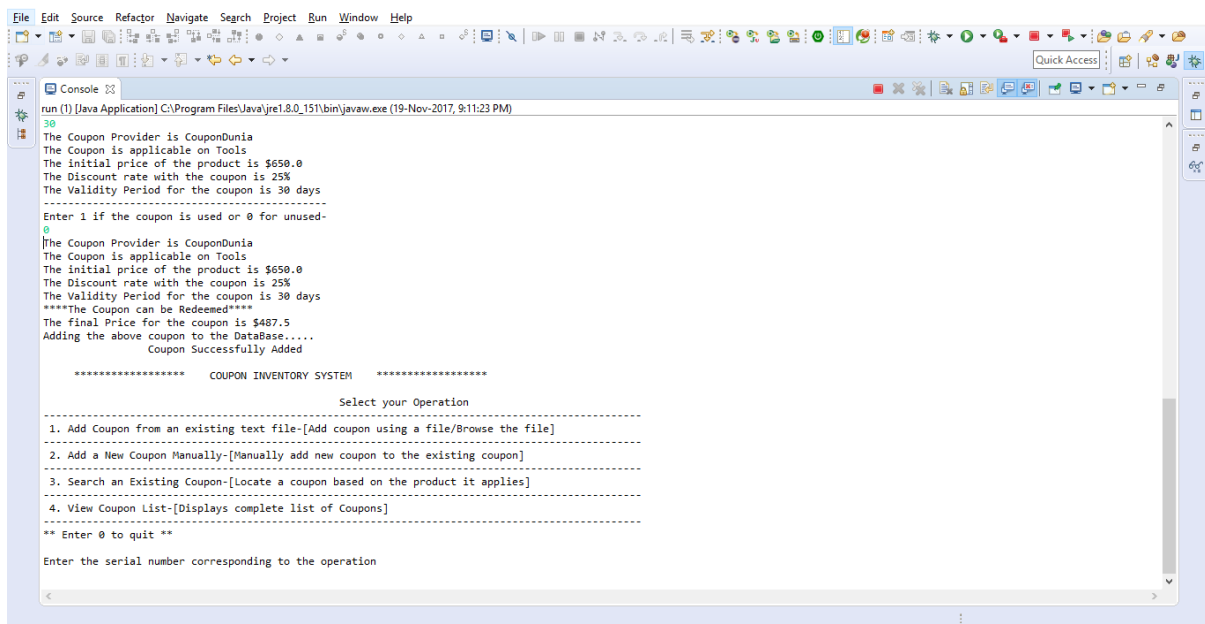
Enter the serial number corresponding to the operation
2
*****ADD COUPON TO LIST*****
## Enter 0 to quit ##
Enter the coupon Provider:
(example- Groupon/ Living Social/ Likeacoupon/ DealDaddie/ ...)(max 20 characters)
```

Step 3: Follow steps to enter the details as it displays in the console.



```
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:11:23 PM)
Enter the serial number corresponding to the operation
2
*****ADD COUPON TO LIST*****
-----
## Enter 0 to quit ##
-----
Enter the coupon Provider:
(example- Groupon/ Living Social/ Likeacoupon/ DealDaddie/ ...)(max 20 characters)
CouponDunia
The Coupon Provider is CouponDunia
-----
## Enter 0 to quit ##
-----
Enter the product name for the coupon:
(example- Groceries/ Medicines/ Tools/ Food/ Services/ Electronics ...)(max 20 characters)
Tools
The Coupon Provider is CouponDunia
The Coupon is applicable on Tools
-----
## Enter 0 to quit ##
-----
Enter the Price of the Product:
650
The Coupon Provider is CouponDunia
The Coupon is applicable on Tools
The initial price of the product is $650.0
-----
## Enter 0 to quit ##
-----
Enter the Discount Rate on the Coupon:
25
The Coupon Provider is CouponDunia
The Coupon is applicable on Tools
The initial price of the product is $650.0
The Discount rate with the coupon is 25%
```

Step 4: Once the coupon has been added to the list, it outputs that the coupon has been successfully added.



```
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:11:23 PM)
30
The Coupon Provider is CouponDunia
The Coupon is applicable on Tools
The initial price of the product is $650.0
The Discount rate with the coupon is 25%
The Validity Period for the coupon is 30 days
-----
Enter 1 if the coupon is used or 0 for unused-
0
The Coupon Provider is CouponDunia
The Coupon is applicable on Tools
The initial price of the product is $650.0
The Discount rate with the coupon is 25%
The Validity Period for the coupon is 30 days
*****The Coupon can be Redeemed*****
The final Price for the coupon is $487.5
Adding the above coupon to the Database.....
Coupon Successfully Added

***** COUPON INVENTORY SYSTEM *****

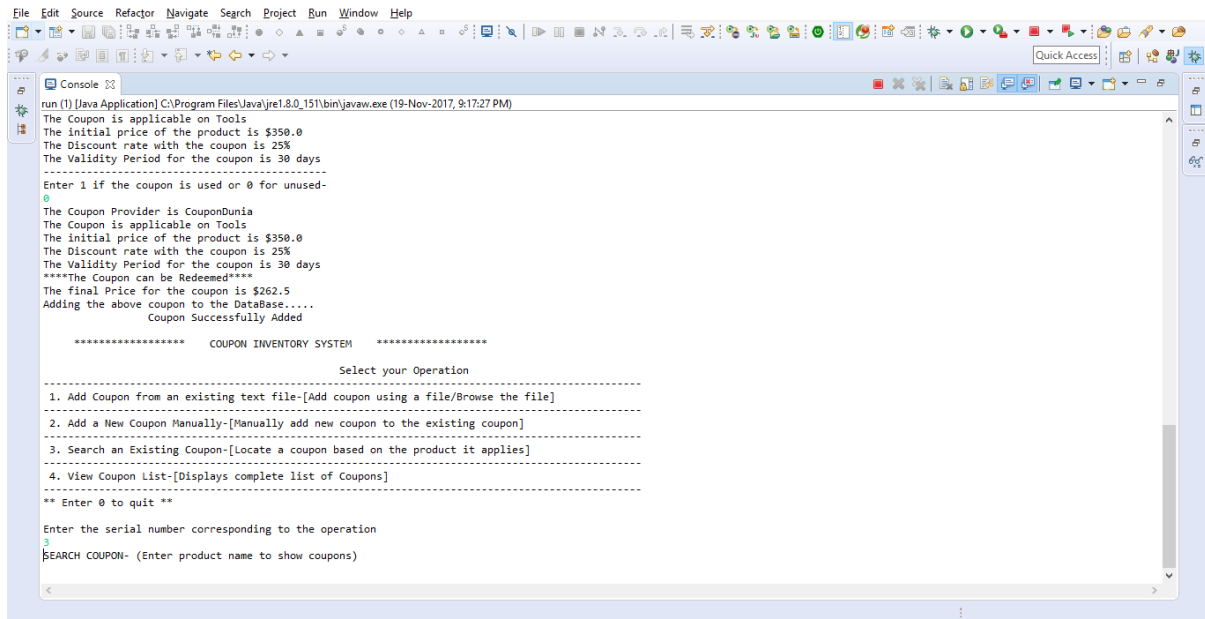
Select your Operation

1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
-----
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
-----
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
-----
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
```


SEARCHING A COUPON

Step 1: Run the program as performed earlier. Enter 3 to search a coupon as displayed in the console



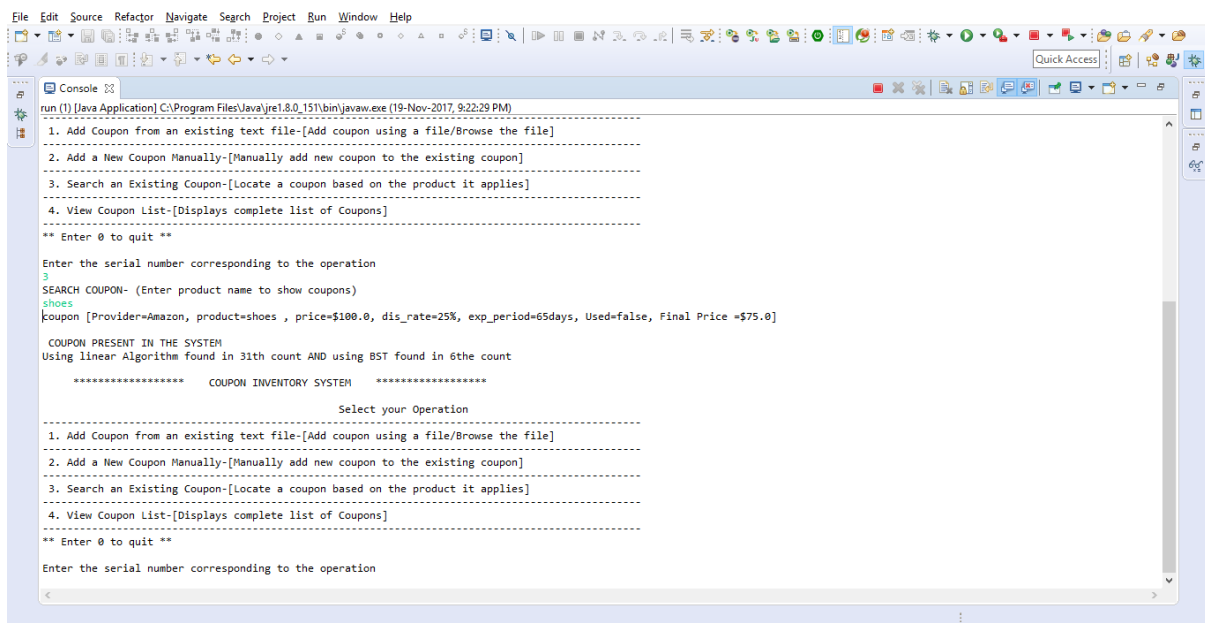
```
File Edit Source Refactor Navigate Search Project Run Window Help
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:17:27 PM)
The Coupon is applicable on Tools
The initial price of the product is $350.0
The Discount rate with the coupon is 25%
The Validity Period for the coupon is 30 days
-----
Enter 1 if the coupon is used or 0 for unused-
0
The Coupon Provider is CouponDunia
The Coupon is applicable on Tools
The initial price of the product is $350.0
The Discount rate with the coupon is 25%
The Validity Period for the coupon is 30 days
****The Coupon can be Redeemed****
The final Price for the coupon is $262.5
Adding the above coupon to the DataBase.....
    Coupon Successfully Added

***** COUPON INVENTORY SYSTEM *****

Select your Operation
-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
3
SEARCH COUPON- (Enter product name to show coupons)
```

Step 2: Enter the product of the coupon you want to search. E.g. - shoes



```
File Edit Source Refactor Navigate Search Project Run Window Help
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:22:29 PM)
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
3
SEARCH COUPON- (Enter product name to show coupons)
shoes
coupon [Provider=Amazon, product=shoes , price=$100.0, dis_rate=25%, exp_period=65days, Used=false, Final Price =*$75.0]

COUPON PRESENT IN THE SYSTEM
Using linear Algorithm found in 31th count AND using BST found in 6th count

***** COUPON INVENTORY SYSTEM *****

Select your Operation
-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
```

As seen in the console, the coupon is found and displays it. It also displays the search algorithm counts that resulted the search.

VIEWING A COUPON

Step 1: Run the run.java file as performed earlier and add coupons to the system.

```
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:27:07 PM)

***** COUPON INVENTORY SYSTEM *****

Select your Operation
-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
2
2 coupons added from the file to the list.

***** COUPON INVENTORY SYSTEM *****

Select your Operation
-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

Enter the serial number corresponding to the operation
```

Step 2: Enter 4 to view the coupon in the system

```
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:27:07 PM)

***** COUPON INVENTORY SYSTEM *****

Select your Operation
-----
1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]
-----
** Enter 0 to quit **

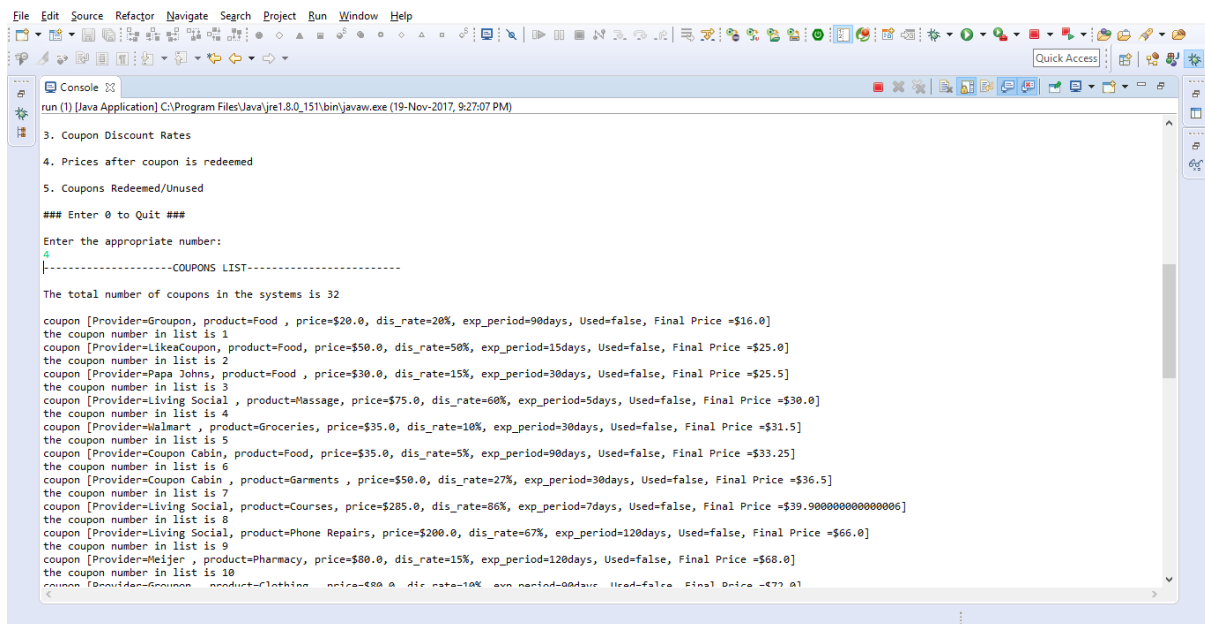
Enter the serial number corresponding to the operation
4
|**** VIEW COUPONS ****|
-----

Sort using
1. Coupon Provider
2. Coupon Product
3. Coupon Discount Rates
4. Prices after coupon is redeemed
5. Coupons Redeemed/Unused

### Enter 0 to Quit ###

Enter the appropriate number:
```

Step 3: Based on your operation you can view coupons in ascending order based on any of the shown parameter. For now let's take final price. So enter 4.



```

File Edit Source Refactor Navigate Search Project Run Window Help
run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:27:07 PM)

3. Coupon Discount Rates
4. Prices after coupon is redeemed
5. Coupons Redeemed/Unused

### Enter 0 to Quit ###

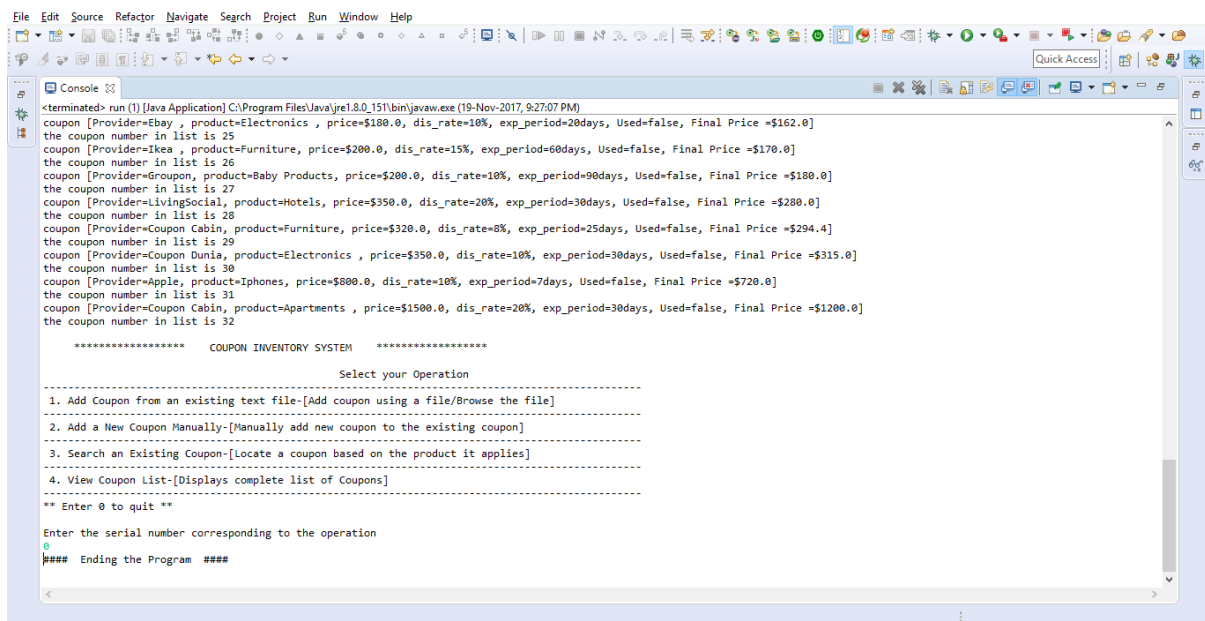
Enter the appropriate number:
4
-----COUPONS LIST-----

The total number of coupons in the systems is 32

coupon [Provider=Groupon, product=Food, price=$20.0, dis_rate=20%, exp_period=90days, Used=false, Final Price =$16.0]
the coupon number in list is 1
coupon [Provider=LikeaCoupon, product=Food, price=$50.0, dis_rate=50%, exp_period=15days, Used=false, Final Price =$25.0]
the coupon number in list is 2
coupon [Provider=Papa Johns, product=Food, price=$30.0, dis_rate=15%, exp_period=30days, Used=false, Final Price =$25.5]
the coupon number in list is 3
coupon [Provider=Living Social, product=Massage, price=$75.0, dis_rate=60%, exp_period=5days, Used=false, Final Price =$30.0]
the coupon number in list is 4
coupon [Provider=Walmart, product=Groceries, price=$35.0, dis_rate=10%, exp_period=30days, Used=false, Final Price =$31.5]
the coupon number in list is 5
coupon [Provider=Coupon Cabin, product=Food, price=$35.0, dis_rate=5%, exp_period=90days, Used=false, Final Price =$33.25]
the coupon number in list is 6
coupon [Provider=Coupon Cabin, product=Garments, price=$50.0, dis_rate=27%, exp_period=30days, Used=false, Final Price =$36.5]
the coupon number in list is 7
coupon [Provider=Living Social, product=Courses, price=$285.0, dis_rate=86%, exp_period=7days, Used=false, Final Price =$39.900000000000006]
the coupon number in list is 8
coupon [Provider=Living Social, product=Phone Repairs, price=$200.0, dis_rate=67%, exp_period=120days, Used=false, Final Price =$66.0]
the coupon number in list is 9
coupon [Provider=Mejler, product=Pharmacy, price=$80.0, dis_rate=15%, exp_period=120days, Used=false, Final Price =$68.0]
the coupon number in list is 10
coupon [Provider=Groupon, product=Flowers, price=$80.0, dis_rate=10%, exp_period=90days, Used=false, Final Price =$72.0]

```

Step 4: The list of coupon can be seen from lowest order to highest.



```

File Edit Source Refactor Navigate Search Project Run Window Help
<terminated> run (1) [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (19-Nov-2017, 9:27:07 PM)

coupon [Provider=Ebay, product=Electronics, price=$180.0, dis_rate=10%, exp_period=20days, Used=false, Final Price =$162.0]
the coupon number in list is 25
coupon [Provider=Ikea, product=Furniture, price=$280.0, dis_rate=15%, exp_period=60days, Used=false, Final Price =$170.0]
the coupon number in list is 26
coupon [Provider=Groupon, product=Baby Products, price=$200.0, dis_rate=10%, exp_period=90days, Used=false, Final Price =$180.0]
the coupon number in list is 27
coupon [Provider=LivingSocial, product=Hotels, price=$350.0, dis_rate=20%, exp_period=30days, Used=false, Final Price =$280.0]
the coupon number in list is 28
coupon [Provider=Coupon Cabin, product=Furniture, price=$320.0, dis_rate=8%, exp_period=25days, Used=false, Final Price =$294.4]
the coupon number in list is 29
coupon [Provider=Coupon Dunla, product=Electronics, price=$350.0, dis_rate=10%, exp_period=30days, Used=false, Final Price =$315.0]
the coupon number in list is 30
coupon [Provider=Apple, product=Iphones, price=$800.0, dis_rate=10%, exp_period=7days, Used=false, Final Price =$720.0]
the coupon number in list is 31
coupon [Provider=Coupon Cabin, product=Apartments, price=$1500.0, dis_rate=20%, exp_period=30days, Used=false, Final Price =$1200.0]
the coupon number in list is 32

***** COUPON INVENTORY SYSTEM *****

Select your Operation

1. Add Coupon from an existing text file-[Add coupon using a file/Browse the file]
2. Add a New Coupon Manually-[Manually add new coupon to the existing coupon]
3. Search an Existing Coupon-[Locate a coupon based on the product it applies]
4. View Coupon List-[Displays complete list of Coupons]

** Enter 0 to quit **

Enter the serial number corresponding to the operation
0
#### Ending the Program ####

```

To terminate the program, enter 0.