

EXPERIMENT – 2.3

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Section/Group: 20BCS-WM-607 (A)

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Subject Code: 20CSP - 321

Subject Name: Project Based Learning in Java

PROBLEM STATEMENT :

Write a Program to perform the basic operations like insert, delete, display and search in list. List contains String object items where these operations are to be performed.

CODE :

```
package com.company.CU;
import java.util.Scanner;
import java.util.List;
import java.util.ArrayList;

public class Unit2Exp3 {

    public static void main(String args[]) {
        List<String> list = new ArrayList<String>();
        int loop = 1;
        Scanner s = new Scanner(System.in);
        String str;

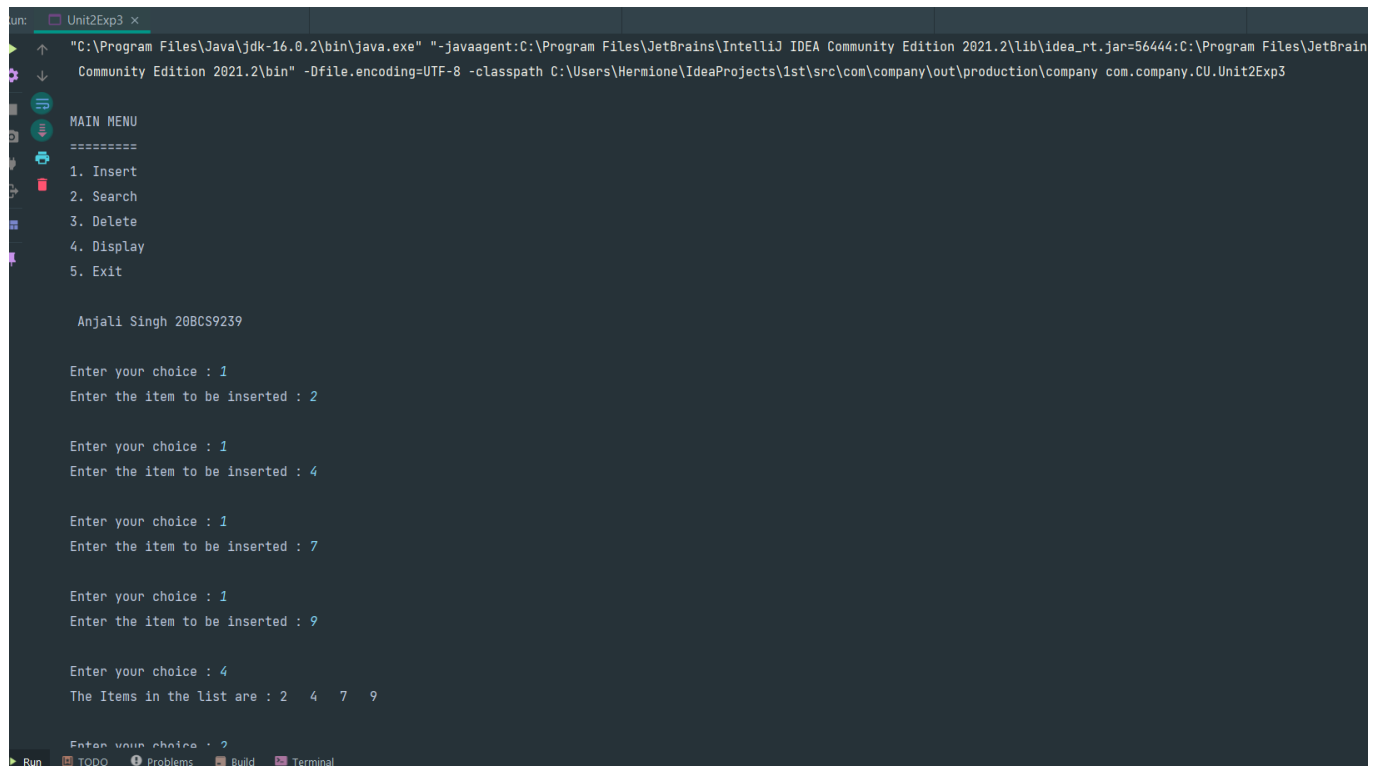
        System.out.println("\nMAIN MENU \n=====");
        System.out.println("1. Insert");
        System.out.println("2. Search");
        System.out.println("3. Delete");
        System.out.println("4. Display");
        System.out.println("5. Exit");
        System.out.println("\n Anjali Singh 20BCS9239");
        do{
            System.out.print("\nEnter your choice : ");
            int choice;
            choice = s.nextInt();
            if (choice == 1) {
                System.out.print("Enter the item to be inserted : ");
                str
= s.next();
                list.add(str);
            }
            else if (choice == 2) {
                System.out.print("Enter the item to be searched : ");
                str
= s.next();
                if (list.indexOf(str) == -1) {
                    System.out.println(str + " is not present");
                } else {
                    System.out.println(str + " is present at index " + list.indexOf(str));
                }
            }
            else if (choice == 3) {
                System.out.print("Enter the item to delete : ");
                str = s.next();
            }
        } while (choice != 5);
    }
}
```

```

        if (list.indexOf(str) == -1) {
            System.out.println(str + " is not present");
        } else {
            System.out.println(str + " is deleted");
            list.remove(str);
        }
    }
    else if (choice == 4) {
        System.out.print("The Items in the list are : ");
        for (String x : list) {
            System.out.print(x + "  ");
        }
        System.out.println();
    }
    else if (choice == 5) {
        loop = 0;
    } else {
        System.out.println("Enter number from 0 to 5 only");
    }
} while (loop == 1);
}
}

```

OUTPUT :



```

Run: Unit2Exp3 x
"C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=56444:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Hermione\IdeaProjects\1st\src\com\company\out\production\company com.company.CU.Unit2Exp3

MAIN MENU
=====
1. Insert
2. Search
3. Delete
4. Display
5. Exit

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Enter your choice : 1
Enter the item to be inserted : 2

Enter your choice : 1
Enter the item to be inserted : 4

Enter your choice : 1
Enter the item to be inserted : 7

Enter your choice : 1
Enter the item to be inserted : 9

Enter your choice : 4
The Items in the list are : 2 4 7 9

Enter your choice : 2

```

```
Unit2Exp3 x
↑ Enter your choice : 1
↓ Enter the item to be inserted : 7
Enter your choice : 1
Enter the item to be inserted : 9
Enter your choice : 4
The Items in the list are : 2 4 7 9
Enter your choice : 2
Enter the item to be searched : 1
1 is not present
Enter your choice : 2
Enter the item to be searched : 4
4 is present at index 1
Enter your choice : 3
Enter the item to delete : 2
2 is deleted
Enter your choice : 4
The Items in the list are : 4 7 9
Enter your choice : 5
Process finished with exit code 0
Run TODO Problems Build Terminal
Build completed successfully in 3 sec, 186 ms (2 minutes ago)
```

LEARNING OUTCOMES:

1. Learnt about different methods provided for the ArrayList.
2. Learnt about File Handling.