## **The-Desk-Application Bug fix**

```
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Collections;
import java.util.Scanner;
public class Main {
  public static void main(String[] args){
    /*System.out.println("Hello World!");*/
    System.out.println("\n******************************\n");
    System.out.println("\tWelcome to TheDesk \n");
    System.out.println("********************************);
    optionsSelection();
  }
  private static void optionsSelection() {
    String[] arr = {"1. I wish to review my expenditure",
        "2. I wish to add my expenditure",
        "3. I wish to delete my expenditure",
        "4. I wish to sort the expenditures",
        "5. I wish to search for a particular expenditure",
        "6. Close the application"
    };
    int[] arr1 = {1,2,3,4,5,6};
    int slen = arr1.length;
    for(int i=0; i<slen;i++){</pre>
      System.out.println(arr[i]);
      // display the all the Strings mentioned in the String array
    }
    ArrayList<Integer> arrlist = new ArrayList<Integer>();
    ArrayList<Integer> expenses = new ArrayList<Integer>();
    expenses.add(1000);
```

```
expenses.add(2300);
    expenses.add(45000);
    expenses.add(32000);
    expenses.add(110);
    expenses.addAll(arrlist);
    System.out.println("\nEnter your choice:\t");
    Scanner sc = new Scanner(System.in);
    int options = sc.nextInt();
    for(int j=1;j<=slen;j++){</pre>
      if(options==j){
        switch (options){
           case 1:
             System.out.println("Your saved expenses are listed below: \n");
             System.out.println(expenses+"\n");
             optionsSelection();
             break;
           case 2:
             System.out.println("Enter the value to add your Expense: \n");
             int value = sc.nextInt();
             expenses.add(value);
             System.out.println("Your value is updated\n");
             expenses.addAll(arrlist);
             System.out.println(expenses+"\n");
             optionsSelection();
             break;
           case 3:
             System.out.println("You are about the delete all your expenses! \nConfirm again by selecting the same
option...\n");
             int con_choice = sc.nextInt();
             if(con_choice==options){
                 expenses.clear();
               System.out.println(expenses+"\n");
               System.out.println("All your expenses are erased!\n");
```

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} else {
             System.out.println("Oops... try again!");
           }
           optionsSelection();
           break;
         case 4:
           sortExpenses(expenses);
           optionsSelection();
           break;
         case 5:
           searchExpenses(expenses);
           optionsSelection();
           break;
         case 6:
           closeApp();
           break;
         default:
           System.out.println("You have made an invalid choice!");
           break;
      }
    }
  }
}
private static void closeApp() {
  System.out.println("Closing your application... \nThank you!");
    }
private static void searchExpenses(ArrayList<Integer> arrayList) {
  System.out.println("Enter the expense you need to search:\t");
  //Complete the method
  Scanner sc = new Scanner(System.in);
  int key = sc.nextInt();
```

```
if(arrayList.contains(key))
        System.out.println("yes it contains "+key);
else
        System.out.println("it dosent contains "+key);
}
private static void sortExpenses(ArrayList<Integer> arrayList) {
        //Complete the method. The expenses should be sorted in ascending order.
        Collections.sort(arrayList);
        System.out.println(arrayList);
}
```