Source Code:

```
import java.util.ArrayList;
import java.util.Scanner;

public class BugFix {

    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++){
            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++){
            if(options==j){
                switch (options){
                    case 1:
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                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");
                } 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) {
        Scanner sc=new Scanner(System.in);
        int leng = arrayList.size();
        System.out.println("Enter the expense you need to search:\t");
        int exp=sc.nextInt();
        boolean check = arrayList.contains(exp);

        if (check)
            System.out.println("The list contains" +exp);
        else
            System.out.println("The list does not contains"+exp);
    }
    private static void sortExpenses(ArrayList<Integer> arrayList) {
        int arrlength =  arrayList.size();
       Collections.sort(arrayList);
System.out.println("After Sorting: "+ arrayList);
    }
}
```