CODE

```
package com.oops;
import java.util.*;

public class Assign_5 {

	public static void main(String[] args) {



		System.out.println("\tWelcome to TheApp \n");
		System.out.println("----------------------------------------");
		Selection();
		}
		private static void Selection() {
		String[] arr = {"1. I want to review my expenditure",
		"2. I want to add my expenditure",
		"3. I want to delete my expenditure",
		"4. I want to sort the expenditures",
		"5. I want 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]);
		}
		ArrayList<Integer> arrlist = new ArrayList<Integer>();
		ArrayList<Integer> expenses = new ArrayList<Integer>();
		expenses.add(1500);
		expenses.add(3500);
		expenses.add(7800);
		expenses.add(92000);
		expenses.add(6500);
		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:
		    System.out.println("Expenses are listed below: \n");
```

```
                System.out.println(expenses+"\n");
                Selection();
                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");
                Selection();
                break;
                case 3:
                System.out.println("You are about the delete your expense!
\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!");
            }
             Selection();
                break;
                case 4:
                sortExpenses(expenses);
                Selection();
                break;
                case 5:
                searchExpenses(expenses);
                Selection();
                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)
{
int leng = arrayList.size();
System.out.println("Enter the expense you need to search:\t");
Scanner sc = new Scanner(System.in);
int search = sc.nextInt();
int index = 0;
for (int i = 0; i < arrayList.size(); i++)
{
  if (arrayList.get(i) == search) {
  index = i;
}
}


   if (index == 0)
   {
   System.out.println("Value not found in the list");
   }
   else
   {
   System.out.println("Value found at index " + index);
}


}
private static void sortExpenses(ArrayList<Integer> arrayList) {
int arrlength = arrayList.size();
int temp = 0;
int temp1 = 0;
for (int i = 0; i < arrlength; i++)
{
for (int j = 1; j < (arrlength - i); j++)
{
if (arrayList.get(j-1) > arrayList.get(j))
{
temp = arrayList.get(j-1);
temp1 = arrayList.get(j);
arrayList.set(j,temp);
arrayList.set(j-1,temp1);
}
}
```

```
 }
 System.out.println("Expenses are sorted in ascending order:\n");
 System.out.println(arrayList);
 System.out.println();

 }
}
```