```java
import java.util.ArrayList;
import java.util.Arrays;
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++){
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:
System.out.println "Your saved expenses are listed below: 1");
System.out.println(expenses+"\n");
optionsSelection();
break;
case 2:
System.out.println "Enter the value to add your Expense: ");
int value = sc.nextInt();
expenses.add(value);
System.out.println "Your value is updated");
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...");
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) {
int leng = arrayList.size();
System.out.println("Enter the expense you need to search:\t");
//Complete the method
boolean foundResult=false;
Scanner sc =new Scanner(System.in);
int expense= sc.nextInt();
ArrayList<Integer> expenses = new ArrayList<Integer>();
for(int i=0;i<leng;i++) {
if(arrayList.get(i)==expense) {
foundResult=true;
System.out.println("The expense "+expense+" is available.\n");
break;
}
}
if(!foundResult) System.out.println("Expense not found.\n");
}
private static void sortExpenses(ArrayList<Integer> arrayList) {
int arrlength = arrayList.size();
//Complete the method. The expenses should be sorted in ascending order.
Integer[] arr= arrayList.toArray(new Integer[arrlength]);
```

```
Arrays.sort(arr);
System.out.println("Sorted Expenses: ");
System.out.println(Arrays.toString(arr));
System.out.println("\n");
}
}
```