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**GitHubLink:**

**Background of the problem statement:---**

You have been assigned a few tasks during the sprint planning. Solving the bugs raised by the testing team is one among them. You are given the boilerplate code and are asked to complete it by fixing the bugs.

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**DESCRIPTION**

All software contains bugs. Bugs are just a reality of software development, and much as product managers would see them as pure waste, fixing them does add value. As developers, we have a responsibility to deal with bugs as quickly and effectively as possible.

**The bugs needed to be fixed were:**

* Add the missing source code to the application based on searching technique.
* Write source code for sorting the predefined array and ensure the functionality of the application.

**Searching & Sorting techniques: -**

• Linear Search  
• Binary Search  
• Merge sort  
• insertion sort  
• Selection sort  
• Quick sort

**Software Requirement:-**

• Operating system: - windows XP/7/10/11  
• Language Used: - Java  
• Platform: - Eclipse OR other IDE  
• Tools: - Git, GitBash

**Steps taken to fix the bugs:**

* Since the project used ArrayList collection, the developer also used predefined collection methods to fix the bugs.
* Ran the program and noticed bugged behaviors
* For searching bug:
  + Found the appropriate comments to code for the searching technique, method searchExpenses()
  + Fixed the variable typo, changed "leng" to "length"
  + Added code for taking search value from user
  + Added code for searching technique, used methods ArrayList.contains() and ArrayList.indexOf() to search for the user's input and show the user either index of the search value or the value was not found
* For sorting bug:
  + Found the appropriate comments to code for sorting the predefined array, method sortExpenses()
  + Fixed the variable typo, changed "arrlength" to "arrLength"
  + Added code for sorting technique using Collections.sort() and print out the sorted array
* Final ran the program to make sure all documented bugs are fixed

**Output:--**

Hello

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Welcome to The Desk

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Choose the options below:--

1. For review my expenditure

2. For add my expenditure

3. For delete my expenditure

4. For sort the expenditures

5. For to search for a particular expenditure

6. Close the application

Enter your choice:

**Screenshot:-**

