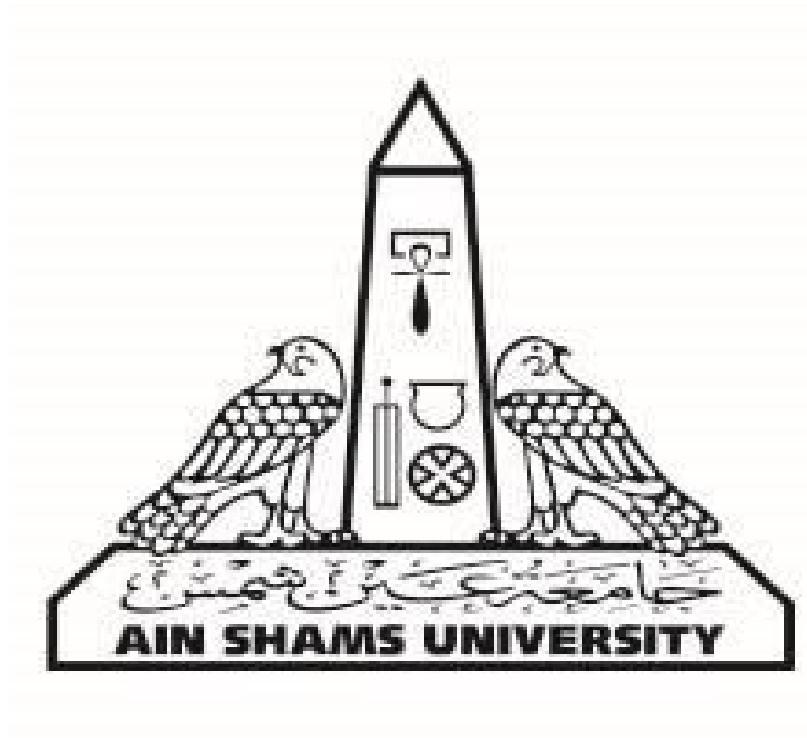# Operating System Project 1 Report

**Students:-**
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# Project Description:-

HOW Its work:-

**First Thread**                                    **Second Thread**

**Test cases:**

**input :**
2 9 12 11 97 10 3 4
82 1 90 40 33 22
75 66 55 99
40 30 20
90 10

**output :**
2 3 4 9 10 11 12 97
1 22 33 50 82 90
55 66 75 99
20 30 40
10 90

**Project Details:-**
Project Subject:  Multi-thread .
Project Language: developed using Java.
Project IDE: Neat-beans.
Project Objective: **I**mplements Multi-thread concept by sorting integer lists(global arrays)  using threads.
Project Structure **:**  We have  Four  classes in our project.(Main, SortMergeClass , SortingThread , MergingThread).
**Functionality of each class:-**
Main.java :  Is the class responsible for running our project.
SortMergeClass.java : Where we take the list of integers and sort it by using threads in the two classes SortingThread and MergingThread.
MergingThread.java : Inherits from  threads main class to merge the two sorted global arrays.
 SortingThread.java :   Inherits from  threads main class to sort any integers list,in our case we have two global array.