

CHAPTER VI

CONCLUSION

6.1. Conclusion

Based on the results of this project, it can be concluded that the PVM (Parallel Virtual Machine) could become a solution to build a parallel computer workstation. PVM works as middleware, which simulates the parallel workstation environment by using several computers that connected in a network.

Parallel computing requires a parallel algorithms. This algorithm allows a problem to be solved in parallel. This project uses bubble sort algorithm to be applied in parallel algorithm. So, it can produce a better complexity of iteration compared with the algorithm in single processor. It has a Big O level of time cost $O(n)$ complexity of iteration.

However, from some results of tests that performed in this project, it was found that if the number of CPU's/machines used are increased, it does not always make the performance of the program increases. This could be happened because of many factors can affect the performance of computation. Some of that factors are: the network connection, the performance of each CPU / machine used, the process distribution of parallel program which are made is not effective.

6.2. Further Research

Application of parallel computing on this project is still very simple. Based on the study literature, there are a lot of technique that can be applied to construct a parallel program so that the application of parallel computing is still very possible to be studied and developed further.