Report X: Homework Report Template

Your name

October 3, 2025

1 Introduction

Summary of the work you've done, what are the topics we cover in this seminar, etc. Remember that you should deliver this report at the start of the seminar.

What is the main topic related to distributed systems covered in this seminar? Why is it important?
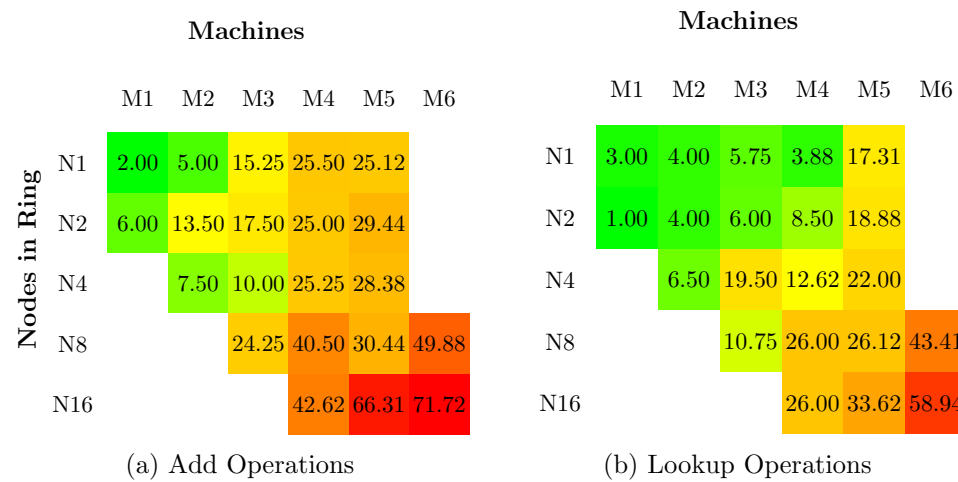
Machines

(a) Add Operations — Nodes in Ring

	M1	M2	M3	M4	M5	M6
N1	2.00	5.00	15.25	25.50	25.12	
N2	6.00	13.50	17.50	25.00	29.44	
N4		7.50	10.00	25.25	28.38	
N8			24.25	40.50	30.44	49.88
N16				42.62	66.31	71.72

Machines

(b) Lookup Operations

	M1	M2	M3	M4	M5	M6
N1	3.00	4.00	5.75	3.88	17.31	
N2	1.00	4.00	6.00	8.50	18.88	
N4		6.50	19.50	12.62	22.00	
N8			10.75	26.00	26.12	43.41
N16				26.00	33.62	58.94

Figure 1: Performance comparison in milliseconds for 1000 operations per machine

2 Main problems and solutions

Summarize your problems, proposed solutions, etc. You do not need to copy&paste your code. Only if needed, you may write down small code snipeds to show how you have solved a specific problem/question.

Did you find any specific problem with the development of your solution? How did you solve it?

If you want to give a code example you can do it uing the verbatim environment.

```
this(X) ->
    Y = is(X),
    a(test(Y)).
```

3   Evaluation

If needed, you may provide figures or tables with main results evaluating your proposals. For each seminar, we will provide you with some guidance on which kind of evaluation you should do.

And Figures **??** and **??** shows how to add a figure with some results. These figures have been created with gnuplot. There are tons of different kinds of plots that can be generated with gnuplot. Make sure to check out `http://gnuplot.info/demo/` and look at them so you can see what can you do with this program.

To obtain these figures you have to:

1. Create the data file from the experiments (look at file experiment.dat)

2. Create a gnuplot file to create a figure in eps format (look at files results1.plot and results2.plot). These files may be very complex. But for the results we want to show, these examples are enough. To create the eps figures, execute in terminal:

   ```
   $> gnuplot results1.plot
   ```

3. As pdflatex does not recognize eps files, you must convert them to pdf files. This is done by (it will generate a file results1.pdf):

   ```
   $> epstopdf results1.eps
   ```

4. That's it! Just include the figure as shown in this template and compile the latex as explained in the document "Introduction to LaTeX 2_ε".

If you want, you can also create a table of results as Table 1. If you look at the template code, you will see how to do a table in LaTeX.

4   Conclusions

Change the layout of this template as you want. It's only for your guidance but if you feel that you need a different structure, feel free to change it. The report should not be too long ($\approx$ 2-3 pages).

What have you learnt from the problem presented? Was it useful?

First column	Second column	Third column
Case 1	1.1	1.2
Case 2	2.1	2.2
Case 3	3.1	3.2

Table 1: Some random results in a table