Abstract

Give a brief summary of the problem, experimental procedure, and what was done.

1 Introduction

Introduce the lab and what what was required to do. You may use overleaf.com to create your reports. A much nicer way of doing things.

2 Implementation

Explain what was done. Please explain what was done. Check the grading rubric to ensure that all points were tackled. This is how you could include your code:

Listing 1: Python Example

```
import numpy as np

def incmatrix(genl1,genl2):
    m = len(genl1)
    n = len(genl2)
    M = None #to become the incidence matrix
    VT = np.zeros((n*m,1), int)  #dummy variable

    #compute the bitwise xor matrix
    M1 = bitxormatrix(genl1)
    M2 = np.triu(bitxormatrix(genl2),1)

    for i in range(m-1):
        for j in range(i+1, m):
            [r,c] = np.where(M2 == M1[i,j])
            for k in range(len(r)):
                VT[(i)*n + r[k]] = 1;
                VT[(i)*n + c[k]] = 1;
                VT[(j)*n + r[k]] = 1;
                VT[(j)*n + c[k]] = 1;

                if M is None:
                    M = np.copy(VT)
                else:
                    M = np.concatenate((M, VT), 1)

                VT = np.zeros((n*m,1), int)

    return M
```

3 Experimental Platform

Explain the experimental setup including parameters, hardware used, and compiler

4 Results

Presents the results that were obtained.

5 Discussion

As the semester progresses, you would be expected to further analyze your data critically and drawing valid inferences from data, a vital skill for scientists. include the following whenever possible:

1. Numerical Analysis
2. Graphical Analysis using Excel to construct graphs or plots. Provide critical analysis, explaining if your graphical analysis agree with your calculations.

5.0.1 Example Table

This is a sample table.

Member	Designation	Category	λ_e
Active Link	360UB57	1	25
Collector Beam	360UB57	2	30
Column	310UC137	2	30
Brace	250UC73	3A	40

Table 1: This is a caption

And this is a sample equation:

$$e \leqslant 1.6 M_s / V_v \qquad \text{(Eq. 1)}$$

6 Conclusion

And so on...