Chapter 1

Test Chapter

$$\sum_{i=0}^{\infty} a_i x^i \tag{1.1}$$

The equation 1.1 shows a sum that is divergent. This formula will be used later test For further references see Something Linky LaTeX [2] is a set of macros built atop TeX [1].

Example. Example Number

$$\frac{1}{2}$$

```
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)
    a = "colour"
    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
```

Listing 1.1: Python example

Theorem 1.0.1. Test theorem lol

Proof. Proof lol □

Bibliography

[1] Donald E. Knuth. *The TEX Book*. Addison-Wesley Professional, 1986.

[2] Leslie Lamport. *LATEX: a Document Preparation System*. Addison Wesley, Massachusetts, 2 edition, 1994.