HW3

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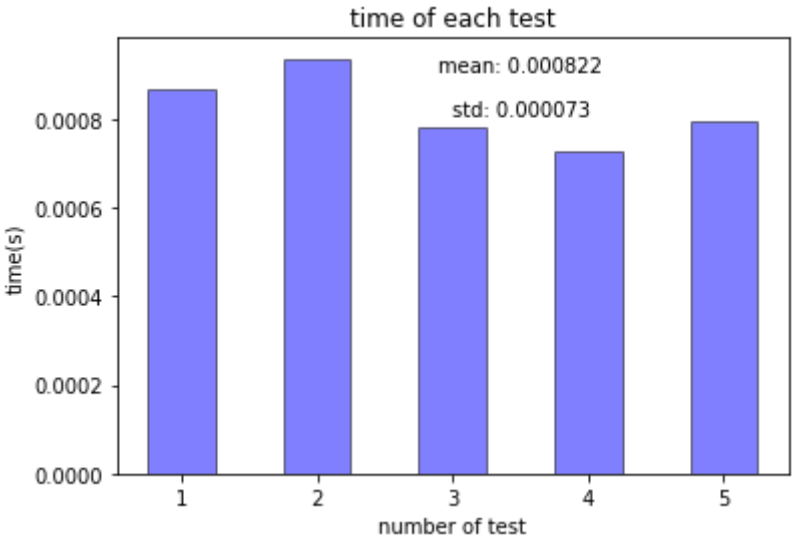
Comparison

- **Huffman**

  Five time comparison

  For 913 bytes data

```
henryc@52-0460994-H1:/mnt/c/Users/henry/desktop/College/Junior/DataSturcture/HW3/huffman$ ./huffcode -i test.txt -o encode.txt -c
Time taken: 0.000867
henryc@52-0460994-H1:/mnt/c/Users/henry/desktop/College/Junior/DataSturcture/HW3/huffman$ ./huffcode -i test.txt -o encode.txt -c
Time taken: 0.000937
henryc@52-0460994-H1:/mnt/c/Users/henry/desktop/College/Junior/DataSturcture/HW3/huffman$ ./huffcode -i test.txt -o encode.txt -c
Time taken: 0.000784
henryc@52-0460994-H1:/mnt/c/Users/henry/desktop/College/Junior/DataSturcture/HW3/huffman$ ./huffcode -i test.txt -o encode.txt -c
Time taken: 0.000727
henryc@52-0460994-H1:/mnt/c/Users/henry/desktop/College/Junior/DataSturcture/HW3/huffman$ ./huffcode -i test.txt -o encode.txt -c
Time taken: 0.000797
```



其花費時間分別為：

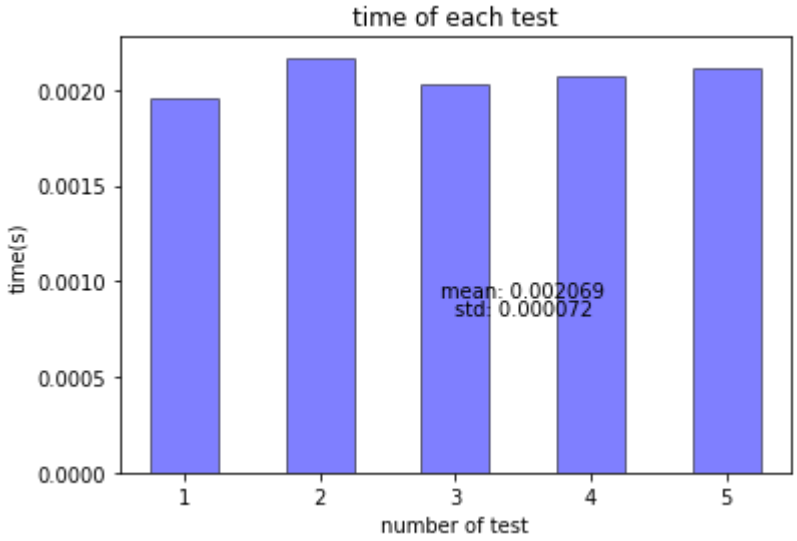
```
    0.000867, 0.000937, 0.000784,0.000727,0.000797
```

平均花費：0.000822(s)

- Arithmetic

  Five time comparison

  For 913 bytes data



其花費時間分別為：

```
0.001961,0.002170,0.002026,0.002069,0.002117
```

平均花費：0.002069(s)

總結

五次比較平均下來 Huffman coding 所花費相較於 Arithmetic coding 所花費的時間較少。