

DSA Assignment4 Result

-Open Source Practice

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1. Result

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penguin@LAPTOP-NP8CU4V0:~$ cd test
penguin@LAPTOP-NP8CU4V0:~/test$ cd HW4
penguin@LAPTOP-NP8CU4V0:~/test/HW4$ g++ main.cpp -o aa
penguin@LAPTOP-NP8CU4V0:~/test/HW4$
```

```

    <Following is Huffman Coding>
e: 0
d: 10
a: 1100
b: 1101
c: 111

    <Following is Arithmetic Coding>
Enter probability of each character:
Symbol Probability      Range_from      Range_to
-----
a      0.05             0             0.05
b      0.1              0.05          0.15
c      0.2              0.15          0.35
d      0.25             0.35          0.6
e      0.4              0.6           1

Please enter abcde within length of 5, for example:abcde edcba

Encoding
Symbol Low_v High_v diff
e      0.6    1     0.4
d      0.74   0.84  0.1
c      0.755  0.775  0.02
b      0.756  0.758  0.002
a      0.756  0.7561 0.0001
Code word for edcba is: 0.756

Decoding:
Code   Output Range_from Range_to
0.756  e      0.6         1
0.39   d      0.35        0.6
0.16   c      0.15        0.35
0.05   b      0.05        0.15
2.67841e-14 a      0         0.05
Text for 0.756 is: edcba
The time of two algorithm is:

Huffman Coding: 5.2e-05seconds
Arithmetic Coding: 0.000469seconds
penguin@LAPTOP-NP8CU4VO:~/test/HW4$

```