

Assignment 3 Report

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Arithmetic Coding

在 compare 資料夾

輸入 `cd arcd-master`

輸入 `cd examples`

```
lin@lin-virtual-machine:~/Desktop/compare$ cd arcd-master
lin@lin-virtual-machine:~/Desktop/compare/arc-master$ cd examples
```

compile

輸入 `make`

```
lin@lin-virtual-machine:~/Desktop/compare/arc-master/examples$ make
[ 33%] Built target arcd
[ 66%] Built target adaptive_model
[100%] Built target arcd_stream
```

excute

壓縮

輸入 `./arcd_stream -e < input.file | tee output.file`

```
lin@lin-virtual-machine:~/Desktop/compare/arc-master/examples$ ./arcd_stream -e < text.txt | tee Ctext.txt
...
5xxYeCee\ @cGese=...
w_F...B3e)6TCEH...Y0<eIee)\eN...GeJ+...A...
e3e0e2...eD
...
花費時間 0.000465 seconds
```

花費時間 0.000465 seconds

輸入 `./arcd_stream -d < input.file | tee output.file`

花費時間 0.000703 seconds

在 compare 資料夾

```
lin@lin-virtual-machine:~/Desktop/compare$ cd huffman-main
```

```
lin@lin-virtual-machine:~/Desktop/compare/huffman-main$ make
cc -g -Wall -Werror -Wextra -O0 -std=c11 -D_POSIX_C_SOURCE=2 -c -o huffcode.o huffcode.c
cc -g -Wall -Werror -Wextra -O0 -std=c11 -D_POSIX_C_SOURCE=2 -c -o huffman.o huffman.c
```

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```
lin@lin-virtual-machine:~/Desktop/compare/huffman-main$ ./huffcode -i text.txt -o CTEST.txt -c
花費時間 0.000537 seconds
```

花費時間 0.000537 seconds

壓縮檔案部分截圖



解壓縮

輸入 `./huffcode -i input.file -o output.file -d`

```
lin@lin-virtual-machine:~/Desktop/compare/huffman-main$ ./huffcode -i CTEST.txt -o DTEST.txt -d
花費時間 0.000607 seconds
```

花費時間 0.000607 seconds

解壓縮檔案部分截圖

