# Abstract:

A screenshot of a computer program

AI-generated content may be incorrect.

LZ77 Class:  
A computer screen shot of a program

AI-generated content may be incorrect.

# Compress method:

A screen shot of a computer program

AI-generated content may be incorrect.

A screen shot of a computer

AI-generated content may be incorrect.

Decompress:  
A screen shot of a computer program

AI-generated content may be incorrect.

A screen shot of a computer program

AI-generated content may be incorrect.

# Main:

A screen shot of a computer screen

AI-generated content may be incorrect.

# Test cases:

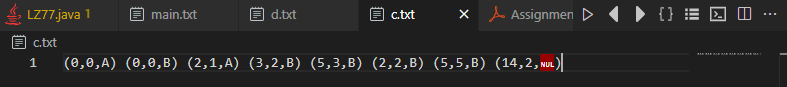
## Test 1:

for ABAABABAABBBBBBBBBBBBA in main.txt, compressed in c.txt and decompressed in d.txt

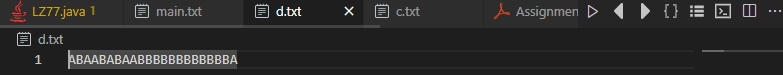
A screenshot of a computer

AI-generated content may be incorrect.

c.txt:



d.txt:



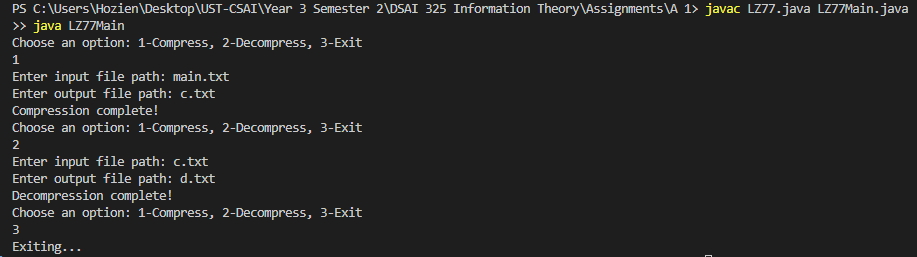
Original size = 22\*8 =176 bits

Tag size=4+3+8=15 bits / tag

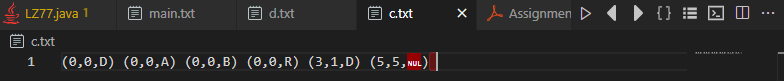
Compressed size = 15\*8 = 120bits

## Test 2:

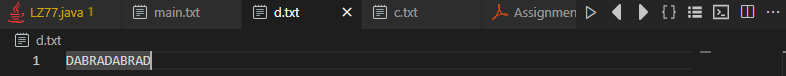
for DABRADABRAD same process as the first case



c.txt:



d.txt:



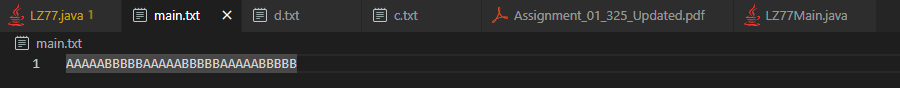
Original size = 8\*11 = 88 bits

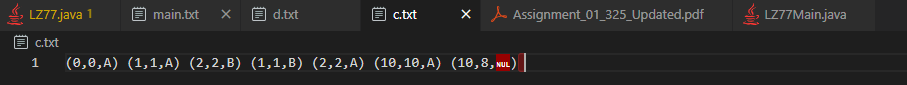
Tag size = 3 + 3 + 8 = 14 bits / tag

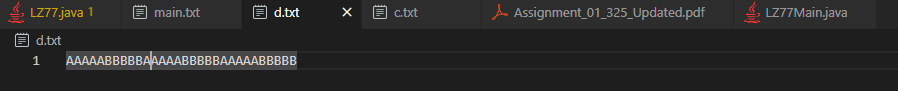
Compressed size = 14 \* 6 = 84 bits

# Handling repetitive sequence:

### Testing on AAAAABBBBBAAAAABBBBBAAAAABBBBB







Original size = 30 \* 8 = 240 bits

Tag size = 4 + 4 + 8 = 16 bits / tag

Compressed size = 16\*7 = 112 bits

So, it can handle repetitive sequence by looking ahead by 15 characters, and I noticed when I increase the lookahead buffer, the tag size increases.