

## 1. HTML :

Contents of file\_1.html:

With great power comes great responsibility, especially in tech. The future of tech is both exciting and uncertain. AI is transforming the world at a fast pace. The future of tech is both exciting and uncertain.

Huffman Codes and Frequencies:

+-----+-----+-----+		
Character	Frequency	Huffman Code
+=====+		
W	1	10111010
+-----+-----+-----+		
i	16	1010
+-----+-----+-----+		
t	19	000
+-----+-----+-----+		
h	9	11101
+-----+-----+-----+		
	35	110
+-----+-----+-----+		
g	5	111001
+-----+-----+-----+		
r	11	0101
+-----+-----+-----+		
e	20	001
+-----+-----+-----+		
a	12	1000
+-----+-----+-----+		
p	4	101101
+-----+-----+-----+		
o	9	11111

+-----+		
w	2	1011000
+-----+		
c	10	0100
+-----+		
m	2	1001110
+-----+		
s	9	11110
+-----+		
n	12	0111
+-----+		
b	3	100110
+-----+		
l	4	111000
+-----+		
y	2	011000
+-----+		
,	1	10111011
+-----+		
.	4	101111
+-----+		
T	2	1011001
+-----+		
f	6	01101
+-----+		
u	6	10010
+-----+		
x	2	1001111
+-----+		
d	3	011001
+-----+		

A		1		10111001	
---	--	---	--	----------	--

+	+	+	+	+	+
---	---	---	---	---	---

l		1		10111000	
---	--	---	--	----------	--

+	+	+	+	+	+
---	---	---	---	---	---

Original text size (in bits): 1688

Compressed text size (in bits): 899

Compression ratio: 0.5325829383886256

Contents of file\_2.html:

AI is transforming the world at a fast pace. AI is transforming the world at a fast pace. The quick brown fox jumps over the lazy dog. Machine learning can outperform humans in tasks.

Huffman Codes and Frequencies:

+	+	+	+	+	+
---	---	---	---	---	---

Character		Frequency		Huffman Code	
-----------	--	-----------	--	--------------	--

+	+	+	+	+	+
---	---	---	---	---	---

A		2		1000101	
---	--	---	--	---------	--

+	+	+	+	+	+
---	---	---	---	---	---

l		2		1100101	
---	--	---	--	---------	--

+	+	+	+	+	+
---	---	---	---	---	---

		33		00	
--	--	----	--	----	--

+	+	+	+	+	+
---	---	---	---	---	---

i		8		11110	
---	--	---	--	-------	--

+	+	+	+	+	+
---	---	---	---	---	---

s		10		0101	
---	--	----	--	------	--

+	+	+	+	+	+
---	---	---	---	---	---

t		11		1010	
---	--	----	--	------	--

+	+	+	+	+	+
---	---	---	---	---	---

r		11		0111	
---	--	----	--	------	--

+-----+-----+-----+		
a	16	1110
+-----+-----+-----+		
n	11	1001
+-----+-----+-----+		
f	6	10110
+-----+-----+-----+		
o	10	0110
+-----+-----+-----+		
m	5	111111
+-----+-----+-----+		
g	4	110001
+-----+-----+-----+		
h	6	10111
+-----+-----+-----+		
e	10	0100
+-----+-----+-----+		
w	3	110000
+-----+-----+-----+		
l	4	110011
+-----+-----+-----+		
d	3	100011
+-----+-----+-----+		
p	4	110101
+-----+-----+-----+		
c	5	10000
+-----+-----+-----+		
.	4	110100
+-----+-----+-----+		
T	1	11111001
+-----+-----+-----+		

q	1	11111000	
+-----+-----+-----+			
u	4	110111	
+-----+-----+-----+			
k	2	1100100	
+-----+-----+-----+			
b	1	11111011	
+-----+-----+-----+			
x	1	11111010	
+-----+-----+-----+			
j	1	11011011	
+-----+-----+-----+			
v	1	11011010	
+-----+-----+-----+			
z	1	11011001	
+-----+-----+-----+			
y	1	11011000	
+-----+-----+-----+			
M	1	1000100	
+-----+-----+-----+			

Original text size (in bits): 1464

Compressed text size (in bits): 806

Compression ratio: 0.5505464480874317

2. Doc :

Contents of file\_1.docx:

With great power comes great responsibility, especially in tech. The future of tech is both exciting and uncertain. AI is transforming the world at a fast pace. The future of tech is both exciting and uncertain.

### Huffman Codes and Frequencies:

+-----+-----+-----+		
Character	Frequency	Huffman Code
+=====+=====+=====+		
W	1	10111010
+-----+-----+-----+		
i	16	1010
+-----+-----+-----+		
t	19	000
+-----+-----+-----+		
h	9	11101
+-----+-----+-----+		
	35	110
+-----+-----+-----+		
g	5	111001
+-----+-----+-----+		
r	11	0101
+-----+-----+-----+		
e	20	001
+-----+-----+-----+		
a	12	1000
+-----+-----+-----+		
p	4	101101
+-----+-----+-----+		
o	9	11111
+-----+-----+-----+		
w	2	1011000
+-----+-----+-----+		
c	10	0100
+-----+-----+-----+		
m	2	1001110

s	9	11110
n	12	0111
b	3	100110
l	4	111000
y	2	011000
,	1	10111011
.	4	101111
T	2	1011001
f	6	01101
u	6	10010
x	2	1001111
d	3	011001
A	1	10111001
l	1	10111000

Original text size (in bits): 1688

Compressed text size (in bits): 899

Compression ratio: 0.5325829383886256

Contents of file\_2.docx:

AI is transforming the world at a fast pace. AI is transforming the world at a fast pace. The quick brown fox jumps over the lazy dog. Machine learning can outperform humans in tasks.

Huffman Codes and Frequencies:

Character	Frequency	Huffman Code
A	2	1000101
I	2	1100101
	33	00
i	8	11110
s	10	0101
t	11	1010
r	11	0111
a	16	1110
n	11	1001
f	6	10110



+-----+-----+-----+		
o	10	0110
+-----+-----+-----+		
m	5	111111
+-----+-----+-----+		
g	4	110001
+-----+-----+-----+		
h	6	10111
+-----+-----+-----+		
e	10	0100
+-----+-----+-----+		
w	3	110000
+-----+-----+-----+		
l	4	110011
+-----+-----+-----+		
d	3	100011
+-----+-----+-----+		
p	4	110101
+-----+-----+-----+		
c	5	10000
+-----+-----+-----+		
.	4	110100
+-----+-----+-----+		
T	1	11111001
+-----+-----+-----+		
q	1	11111000
+-----+-----+-----+		
u	4	110111
+-----+-----+-----+		
k	2	1100100
+-----+-----+-----+		

b		1		11111011	
+-----+-----+-----+					
x		1		11111010	
+-----+-----+-----+					
j		1		11011011	
+-----+-----+-----+					
v		1		11011010	
+-----+-----+-----+					
z		1		11011001	
+-----+-----+-----+					
y		1		11011000	
+-----+-----+-----+					
M		1		1000100	
+-----+-----+-----+					

Original text size (in bits): 1464

Compressed text size (in bits): 806

Compression ratio: 0.5505464480874317

### 3. PDF :

Contents of file\_1.pdf:

With great power comes great responsibility, especially in tech. The future of tech is both exciting and uncertain. AI is transforming the world at a fast pace. The future of tech is both exciting and uncertain.

Huffman Codes and Frequencies:

+-----+-----+-----+		
Character	Frequency	Huffman Code
+=====+=====+=====+		
W	1	10011110

+-----+-----+-----+		
i	16	1011
+-----+-----+-----+		
t	19	000
+-----+-----+-----+		
h	9	11101
+-----+-----+-----+		
	33	110
+-----+-----+-----+		
g	5	111111
+-----+-----+-----+		
r	11	0101
+-----+-----+-----+		
e	20	001
+-----+-----+-----+		
a	12	0110
+-----+-----+-----+		
p	4	101000
+-----+-----+-----+		
o	9	11110
+-----+-----+-----+		
w	2	1111101
+-----+-----+-----+		
c	10	0100
+-----+-----+-----+		
m	2	1001100
+-----+-----+-----+		
s	9	11100
+-----+-----+-----+		
n	12	1000
+-----+-----+-----+		

b	3	011101	
+-----+			
l	4	101001	
+-----+			
y	2	1010111	
+-----+			
,	1	10011111	
+-----+			
.	4	101010	
+-----+			
T	2	1010110	
+-----+			
f	6	01111	
+-----+			
u	6	10010	
+-----+			
x	2	1111100	
+-----+			
	2	1001110	
+-----+			
d	3	011100	
+-----+			
A	1	10011011	
+-----+			
l	1	10011010	
+-----+			

Original text size (in bits): 1688

Compressed text size (in bits): 909

Compression ratio: 0.5385071090047393

Contents of file\_2.pdf:

AI is transforming the world at a fast pace. AI is transforming the world at a fast pace. The quick  
brown fox jumps over the lazy dog. Machine learning can outperform humans in tasks.

Huffman Codes and Frequencies:

Character	Frequency	Huffman Code
A	2	000110
I	2	1100010
	32	111
i	8	0000
s	10	0110
t	11	1000
r	11	0111
a	16	1101
n	11	1010
f	6	10111
o	10	0101

m		5		10010	
+-----+-----+-----+					
g		4		00010	
+-----+-----+-----+					
h		6		10110	
+-----+-----+-----+					
e		10		0100	
+-----+-----+-----+					
w		3		100110	
+-----+-----+-----+					
l		4		00110	
+-----+-----+-----+					
d		3		100111	
+-----+-----+-----+					
p		4		00100	
+-----+-----+-----+					
c		5		00111	
+-----+-----+-----+					
.		4		110000	
+-----+-----+-----+					
T		1		11001011	
+-----+-----+-----+					
q		1		11001010	
+-----+-----+-----+					
u		4		110011	
+-----+-----+-----+					
k		2		001011	
+-----+-----+-----+					
		1		11001001	
+-----+-----+-----+					
b		1		11001000	

+-----+-----+-----+		
x	1	0001111
+-----+-----+-----+		
j	1	0001110
+-----+-----+-----+		
v	1	11000111
+-----+-----+-----+		
z	1	11000110
+-----+-----+-----+		
y	1	0010101
+-----+-----+-----+		
M	1	0010100
+-----+-----+-----+		

Original text size (in bits): 1464

Compressed text size (in bits): 812

Compression ratio: 0.5546448087431693

#### 4. TXT :

Contents of file\_1.txt:

With great power comes great responsibility, especially in tech. The future of tech is both exciting and uncertain. AI is transforming the world at a fast pace. The future of tech is both exciting and uncertain.

Huffman Codes and Frequencies:

+-----+-----+-----+		
Character	Frequency	Huffman Code
+=====+=====+=====+		
W	1	10111010
+-----+-----+-----+		
i	16	1010

+-----+-----+-----+		
t	19	000
+-----+-----+-----+		
h	9	11101
+-----+-----+-----+		
	35	110
+-----+-----+-----+		
g	5	111001
+-----+-----+-----+		
r	11	0101
+-----+-----+-----+		
e	20	001
+-----+-----+-----+		
a	12	1000
+-----+-----+-----+		
p	4	101101
+-----+-----+-----+		
o	9	11111
+-----+-----+-----+		
w	2	1011000
+-----+-----+-----+		
c	10	0100
+-----+-----+-----+		
m	2	1001110
+-----+-----+-----+		
s	9	11110
+-----+-----+-----+		
n	12	0111
+-----+-----+-----+		
b	3	100110
+-----+-----+-----+		



l		4		111000	
+-----+-----+-----+					
y		2		011000	
+-----+-----+-----+					
,		1		10111011	
+-----+-----+-----+					
.		4		101111	
+-----+-----+-----+					
T		2		1011001	
+-----+-----+-----+					
f		6		01101	
+-----+-----+-----+					
u		6		10010	
+-----+-----+-----+					
x		2		1001111	
+-----+-----+-----+					
d		3		011001	
+-----+-----+-----+					
A		1		10111001	
+-----+-----+-----+					
l		1		10111000	
+-----+-----+-----+					

Original text size (in bits): 1688

Compressed text size (in bits): 899

Compression ratio: 0.5325829383886256

Contents of file\_2.txt:

AI is transforming the world at a fast pace. AI is transforming the world at a fast pace. The quick brown fox jumps over the lazy dog. Machine learning can outperform humans in tasks.

### Huffman Codes and Frequencies:

+-----+-----+-----+		
Character	Frequency	Huffman Code
+=====+=====+=====+		
A	2	1000101
+-----+-----+-----+		
l	2	1100101
+-----+-----+-----+		
	33	00
+-----+-----+-----+		
i	8	11110
+-----+-----+-----+		
s	10	0101
+-----+-----+-----+		
t	11	1010
+-----+-----+-----+		
r	11	0111
+-----+-----+-----+		
a	16	1110
+-----+-----+-----+		
n	11	1001
+-----+-----+-----+		
f	6	10110
+-----+-----+-----+		
o	10	0110
+-----+-----+-----+		
m	5	111111
+-----+-----+-----+		
g	4	110001
+-----+-----+-----+		

h		6		10111	
+-----+-----+-----+					
e		10		0100	
+-----+-----+-----+					
w		3		110000	
+-----+-----+-----+					
l		4		110011	
+-----+-----+-----+					
d		3		100011	
+-----+-----+-----+					
p		4		110101	
+-----+-----+-----+					
c		5		10000	
+-----+-----+-----+					
.		4		110100	
+-----+-----+-----+					
T		1		11111001	
+-----+-----+-----+					
q		1		11111000	
+-----+-----+-----+					
u		4		110111	
+-----+-----+-----+					
k		2		1100100	
+-----+-----+-----+					
b		1		11111011	
+-----+-----+-----+					
x		1		11111010	
+-----+-----+-----+					
j		1		11011011	
+-----+-----+-----+					
v		1		11011010	

z	1	11011001
y	1	11011000
M	1	1000100

Original text size (in bits): 1464

Compressed text size (in bits): 806

Compression ratio: 0.5505464480874317