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Quiz 9 Sistem Multimedia

Kompresi Data

1. **SEKOLAH TINGGI TEKNOLOGI GARUT**

   Menggunakan :

   - **Static Huffman Coding**

A	$= 2 \rightarrow 2/27$	$= 0.074$
E	$= 2 \rightarrow 2/27$	$= 0.074$
G	$= 4 \rightarrow 4/27$	$= 0.148$
H	$= 1 \rightarrow 1/27$	$= 0.037$
I	$= 3 \rightarrow 3/27$	$= 0.111$
K	$= 2 \rightarrow 2/27$	$= 0.074$
L	$= 2 \rightarrow 2/27$	$= 0.074$
N	$= 2 \rightarrow 2/27$	$= 0.074$
O	$= 3 \rightarrow 3/27$	$= 0.111$
R	$= 1 \rightarrow 1/27$	$= 0.037$
S	$= 1 \rightarrow 1/27$	$= 0.037$
T	$= 3 \rightarrow 3/27$	$= 0.111$
U	$= 1 \rightarrow 1/27$	$= 0.037$

     Total = 27 Karakter
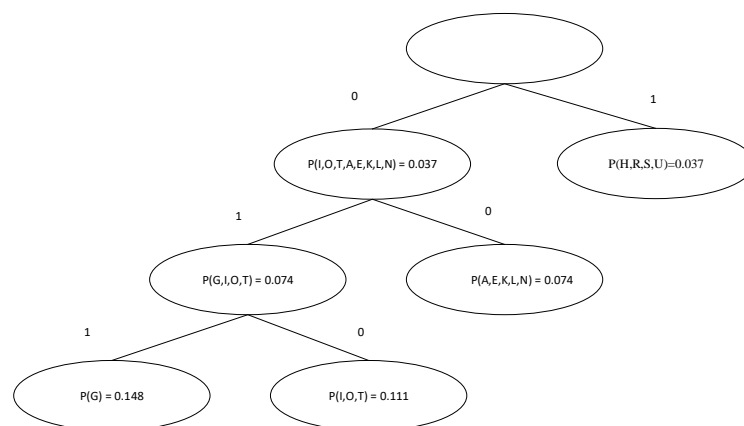
- **Shannon-Fano Algorithm**

SIMBOL	S	E	K	O	L	A	H	T	N	G	I	R	U
JUMLAH	1	2	2	3	2	2	1	3	2	4	3	1	1

- **LZW**
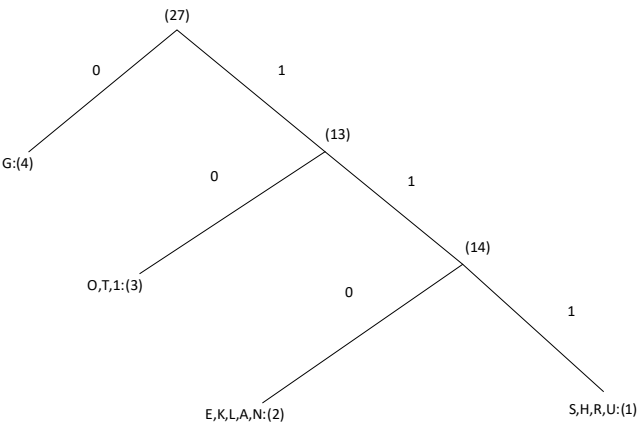
S	K	Entry/Output	Code	String
			1	A
			2	B
			3	C
NULL	1	A		
A	2	B	4	AB
B	2	B	5	BA
B	3	C	6	ABB
C	2	B	7	BAB
B	2	B	8	BC
B	1	A	9	CA
A	3	C	10	ABA
C	2	B	11	ABBA
B	4	AB		
AB	3	C		
C	1	A		
A	1	A		
A	EOF			

2. TEKNIK INFORMATIKA

Menggunakan :

- **Static Huffman Coding**

A $\quad = 2 \rightarrow 2/17 \quad = 0.117$

E $\quad = 1 \rightarrow 1/17 \quad = 0.058$

F $\quad = 1 \rightarrow 1/17 \quad = 0.058$

I $\quad = 3 \rightarrow 3/17 \quad = 0.176$

K $\quad = 3 \rightarrow 3/17 \quad = 0.176$

M $\quad = 1 \rightarrow 1/17 \quad = 0.058$

N $\quad = 2 \rightarrow 2/17 \quad = 0.117$

O $\quad = 1 \rightarrow 1/17 \quad = 0.058$

R $\quad = 1 \rightarrow 1/17 \quad = 0.058$

T $\quad = 2 \rightarrow 2/17 \quad = 0.117$

Total $\quad = 17$ Karakter
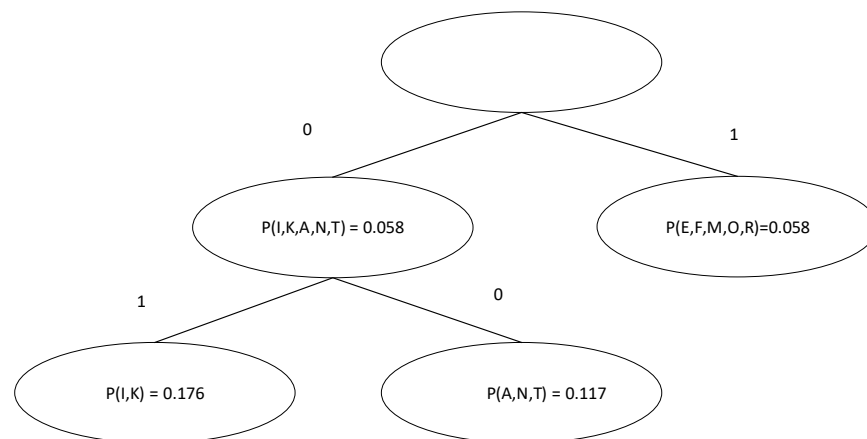
- **Shannon-Fano Algorithm**

SIMBOL	T	E	K	N	I	F	O	R	M	A
JUMLAH	2	1	3	2	3	1	1	1	1	2

- **LZW**
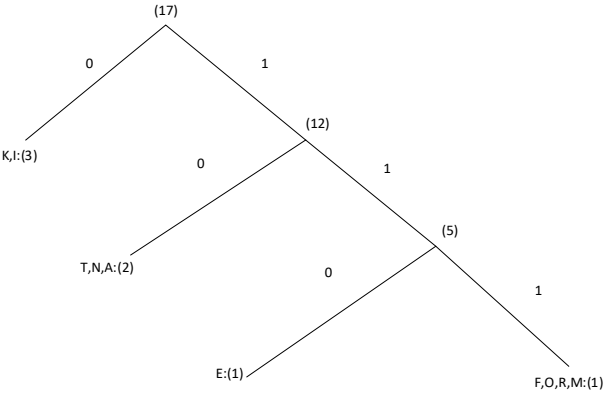
S	K	Entry/Output	Code	String
			1	A
			2	B
			3	C
NULL	2	B		
B	1	A	4	AB
A	3	C	5	BA
C	2	B	6	ABB
B	3	C	7	BAB
C	1	A	8	BC
A	1	A	9	CA
A	1	A	10	ABA
A	1	A	11	ABBA
A	2	B		
B	EOF			

3. **GEMAH RIPAH REPEH RAPIH**

Menggunakan :

- **Static Huffman Coding**

A $= 3 \rightarrow 3/20$ $= 0.15$

E $= 3 \rightarrow 3/20$ $= 0.15$
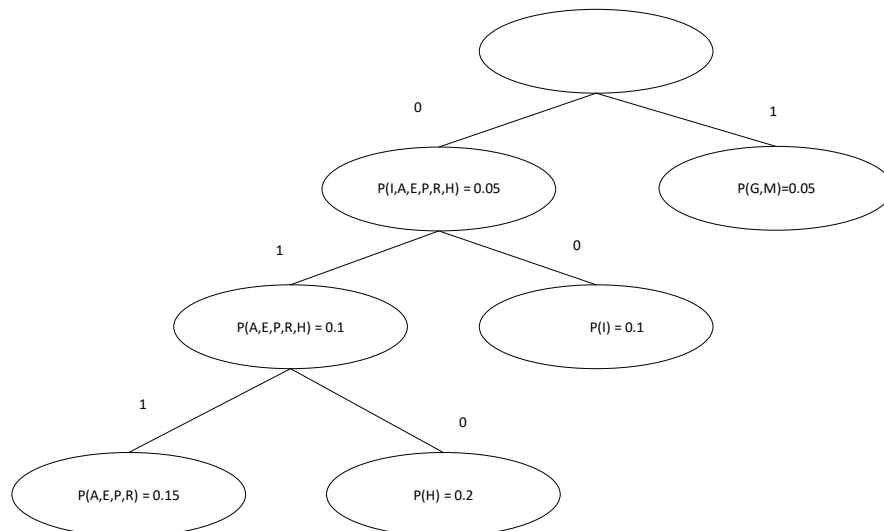
G $= 1 \rightarrow 1/20$ $= 0.05$

H $= 4 \rightarrow 4/20$ $= 0.2$

I $= 2 \rightarrow 2/20$ $= 0.1$

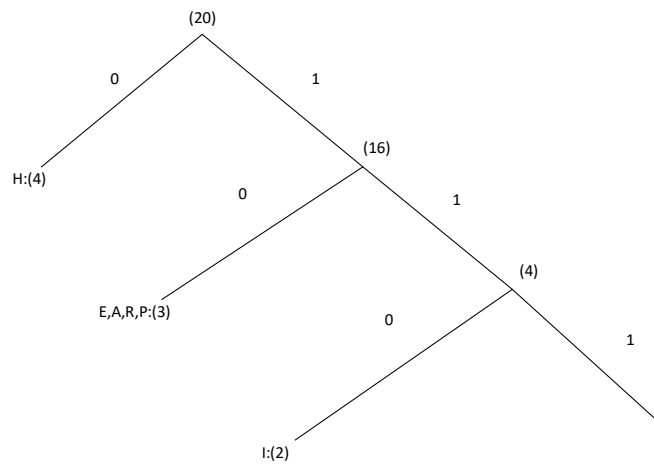M $= 1 \rightarrow 1/20$ $= 0.05$

P $= 3 \rightarrow 3/20$ $= 0.15$

R $= 3 \rightarrow 3/20$ $= 0.15$

Total $= 20$ Karakter

- **Shannon-Fano Algorithm**

SIMBOL	G	E	M	A	H	R	I	P
JUMLAH	1	3	1	3	4	3	2	3

- **LZW**

S	K	Entry/Output	Code	String
			1	A
			2	B
			3	C
NULL	1	A		
A	3	C	4	AB
C	1	A	5	BA
A	3	C	6	ABB
C	4	AB	7	BAB
AB	3	C	8	BC
C	2	B	9	CA
B	3	C	10	ABA
C	EOF		11	ABBA