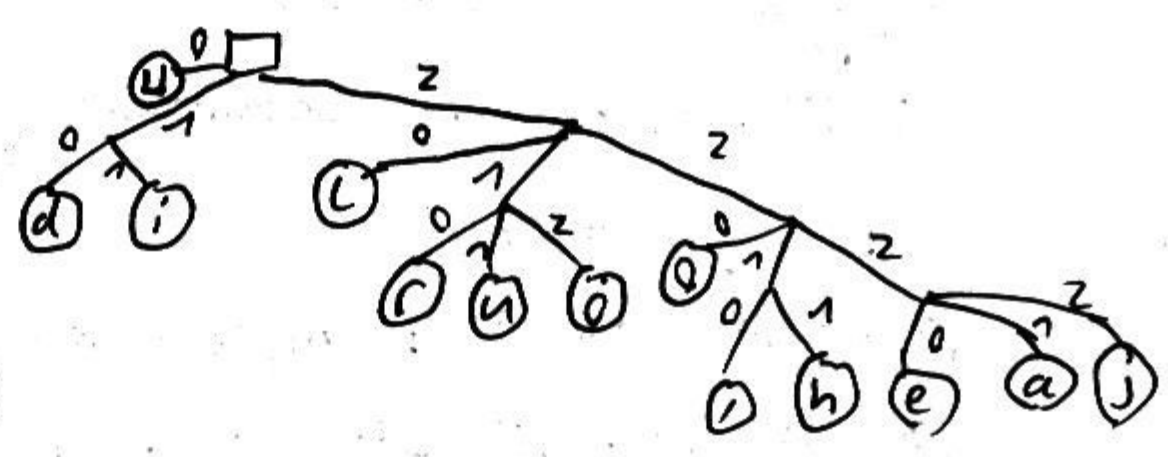


$\Rightarrow \bar{\lambda} = 3,36$

b)

u	d	i	l	r	u	ö	o	,	h	e	a	j
23	22	13	11	6	4	4	4	4	3	3	2	1
0	1						2					
	0	1	0		1				2			
				0	1	2	0	1		2		
								0	1	0	1	2



$\Rightarrow \bar{\lambda} = 2,21$

Huffman:

a) $\frac{u \ d \ i \ l \ r \ u \ \ddot{o} \ o \ , \ h \ e \ a \ j}{23 \ 22 \ 13 \ 11 \ 6 \ 4 \ 4 \ 4 \ 4 \ 3 \ 3 \ 2 \ 1}$

$\Rightarrow \frac{u \ d \ i \ l \ r \ u \ \ddot{o} \ o \ , \ (a)j \ h \ e}{23 \ 22 \ 13 \ 11 \ 6 \ 4 \ 4 \ 4 \ 4 \ 3 \ 3 \ 3}$

$\Rightarrow \frac{u \ d \ i \ l \ (he) \ r \ u \ \ddot{o} \ o \ , \ (a)j}{23 \ 22 \ 13 \ 11 \ 6 \ 6 \ 4 \ 4 \ 4 \ 4 \ 3}$

$\Rightarrow \frac{u \ d \ i \ l \ ((he) \ , \ (a)j) \ r \ u \ \ddot{o} \ o}{23 \ 22 \ 13 \ 11 \ 8 \ 7 \ 6 \ 4 \ 4 \ 4}$

$\Rightarrow \frac{u \ d \ i \ l \ ((he) \ (\ddot{o}o) \ , \ (a)j) \ r \ u}{23 \ 22 \ 13 \ 11 \ 8 \ 8 \ 7 \ 6 \ 4}$

$\Rightarrow \frac{u \ d \ i \ l \ (ru) \ (\ddot{o}o) \ , \ (a)j \ (he)}{23 \ 22 \ 13 \ 11 \ 10 \ 8 \ 7 \ 6}$

$\Rightarrow \frac{u \ d \ ((ru) \ (\ddot{o}o)) \ , \ ((a)j) \ (he) \ i \ l}{23 \ 22 \ 13 \ 13 \ 11 \ 10 \ 8}$

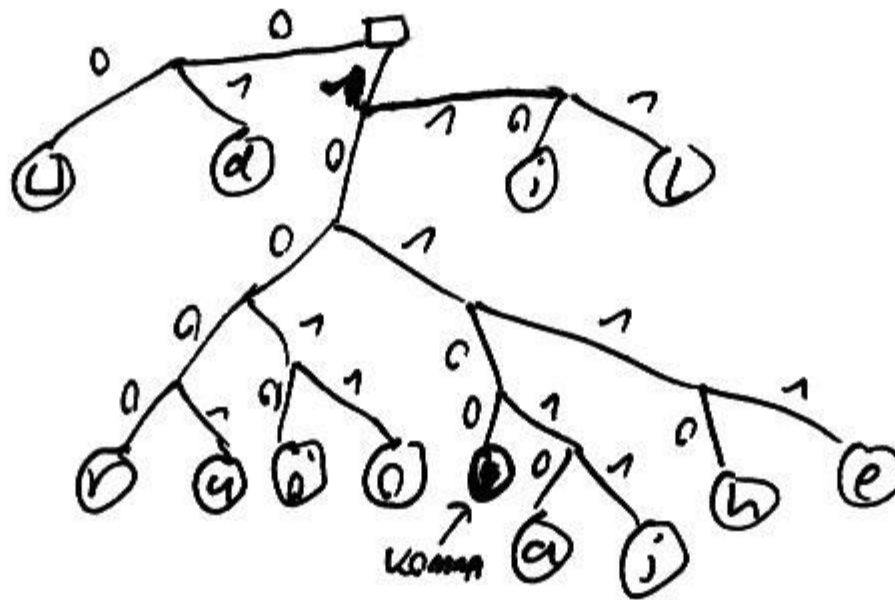
$\Rightarrow \frac{u \ d \ ((ru) \ (\ddot{o}o)) \ ((a)j) \ (he) \ i \ l}{23 \ 22 \ 18 \ 13 \ 13 \ 11}$

$\Rightarrow \frac{(il) \ u \ d \ ((ru) \ (\ddot{o}o)) \ ((a)j) \ (he)}{24 \ 23 \ 22 \ 18 \ 13}$

$\Rightarrow \frac{(((ru) \ (\ddot{o}o)) \ ((a)j) \ (he)) \ (il) \ u \ d}{3 \ 1 \ 24 \ 23 \ 22}$

$\Rightarrow \frac{(u \ d) \ (((ru) \ (\ddot{o}o)) \ ((a)j) \ (he)) \ (il)}{5 \ 5 \ 3 \ 1 \ 24}$

$\Rightarrow \frac{(u \ d) \ (((ru) \ (\ddot{o}o)) \ ((a)j) \ (he)) \ (il)}{5 \ 5 \ 4 \ 5}$



$$\Rightarrow \bar{\lambda} = 3,20$$

$$b) \frac{L \ d \ i \ r \ u \ \ddot{o} \ o \ , \ h \ e \ a \ j}{23 \ 22 \ 13 \ 11 \ 6 \ 4 \ 4 \ 4 \ 4 \ 3 \ 3 \ 2 \ 1}$$

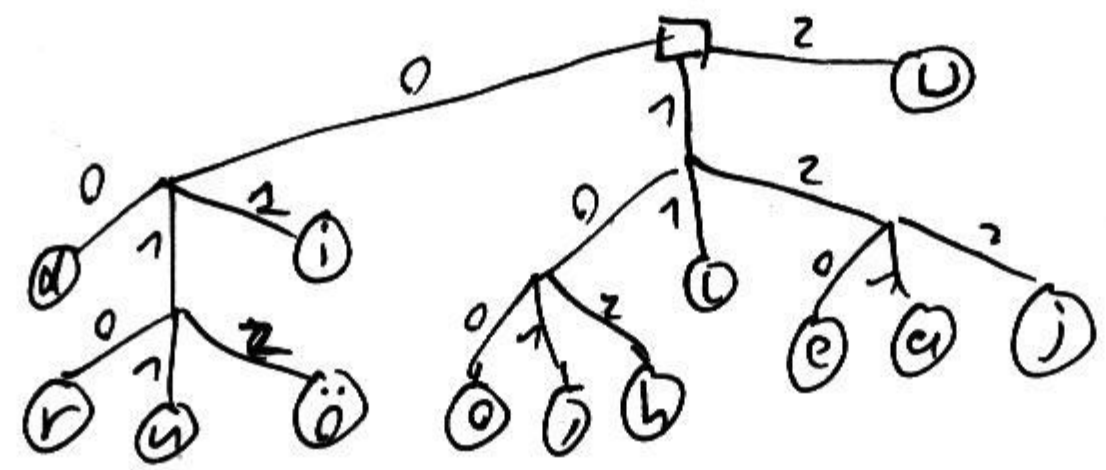
$$\Rightarrow \frac{L \ d \ i \ (e \ a \ j) \ r \ u \ \ddot{o} \ o \ , \ h}{23 \ 22 \ 13 \ 11 \ 6 \ 6 \ 4 \ 4 \ 4 \ 4 \ 3}$$

$$\Rightarrow \frac{L \ d \ i \ (o, h) \ L \ (e \ a \ j) \ r \ u \ \ddot{o}}{23 \ 22 \ 13 \ 11 \ 11 \ 6 \ 6 \ 4 \ 4}$$

$$\Rightarrow \frac{L \ d \ (r \ u \ \ddot{o}) \ i \ (o, h) \ L \ (e \ a \ j)}{23 \ 22 \ 14 \ 13 \ 11 \ 11 \ 6}$$

$$\Rightarrow \frac{((o, h) \ L \ (e \ a \ j)) \ L \ d \ (r \ u \ \ddot{o}) \ i}{28 \ 23 \ 22 \ 14 \ 13}$$

$$\Rightarrow \frac{(d \ (r \ u \ \ddot{o}) \ i) \ ((o, h) \ L \ (e \ a \ j)) \ L}{44 \ 28 \ 23}$$



$$\Rightarrow \bar{\lambda} = 2,08$$