

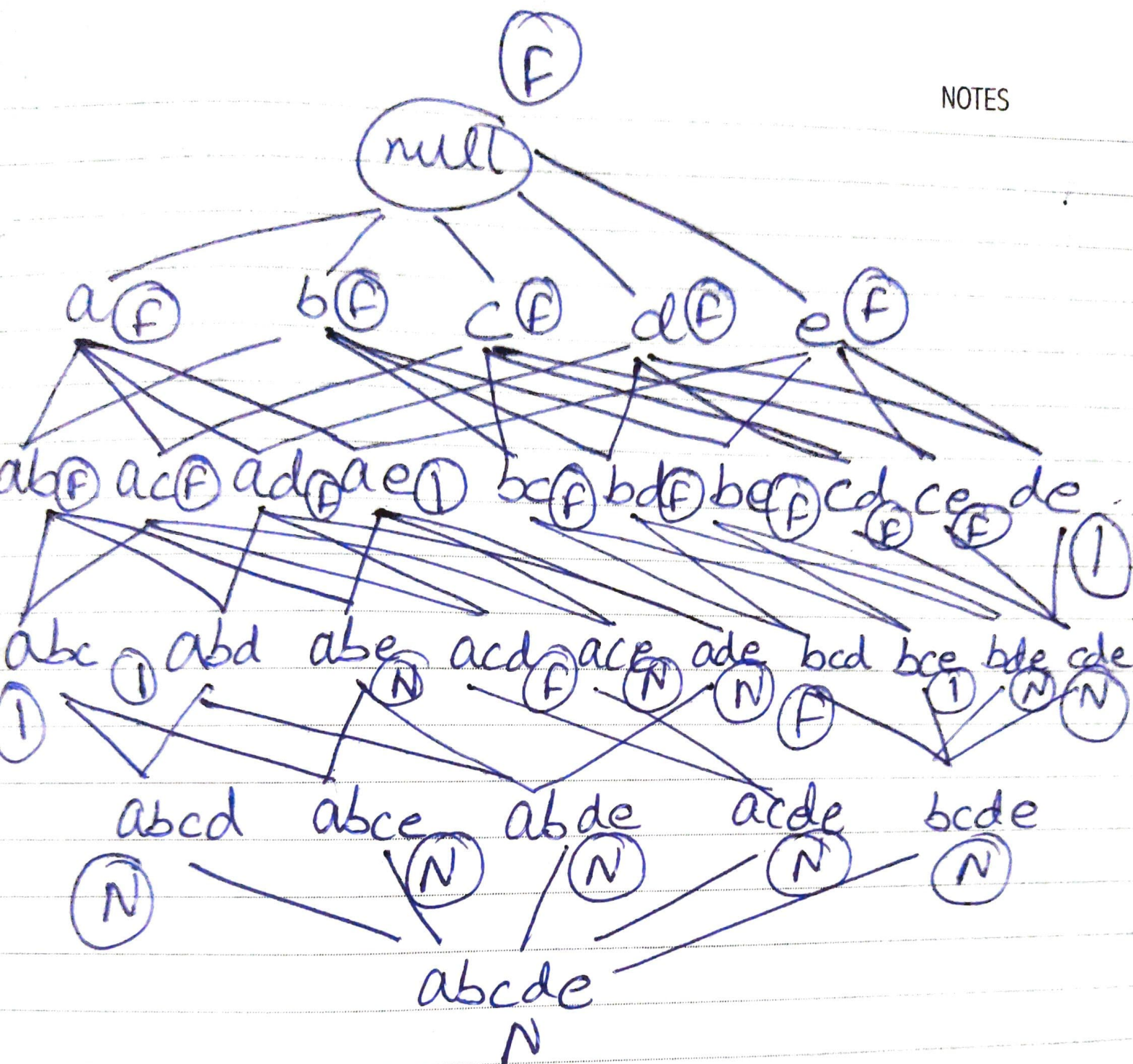
1)

V001  
V002  
V003  
V004  
V005  
V006  
V007  
V008  
V009  
V010

{a, b, c, d}  
{b, e, c}  
{a, b, c, d}  
{a, e, c, d}  
{b, e, c, d}  
{b, c, d}  
{b, c}  
{a, b, e}  
{a, c, d}  
{b, c}

Following notation has been used

a → algorithms  
b → Machine learning  
c → Statistics  
d → Systems  
e → Bioinformatics



Ans(2)

frequent itemsTotal number of items

$$= \frac{16 \times 100}{32}$$

$$= 50\%$$

## NOTES

Ans 3 Pruning ratio =  $\frac{\text{No. of } N}{\text{Total No.}}$

$$= \frac{11 \times 100}{32}$$
$$= 34.375\%$$

Ans 4 false alarm rate

$$= \frac{15 \times 100}{32}$$
$$= 46.875\%$$

Ans 5.

Item	frequency
a	5
b	7
c	9
d	6
e	5



Ranking items by their support

c	9
b	7
d	6
a	5
e	5