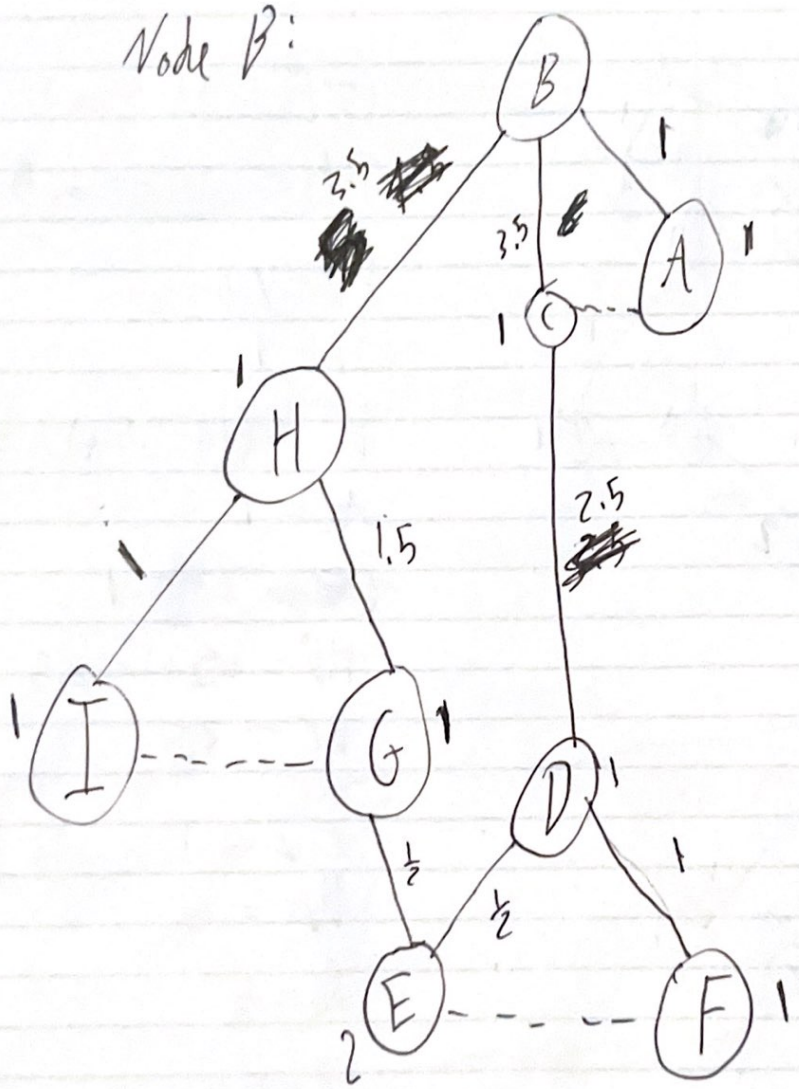
Node B:



$FD = 1/1$

$ED = 1/2$

$EG = 1/2$

$GH = (1 + \frac{1}{2}) \times 1/1 = 1.5$

$IH = 1/1$

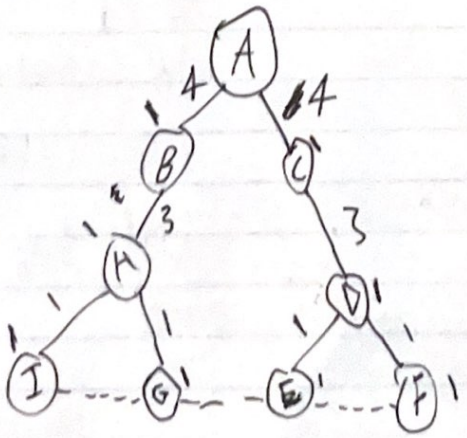
$DC = (1 + \frac{1}{2} + 1) \times \frac{1}{1} = 2.5$

$HB = (1 + 1 + 1.5 + \text{[illegible]}) \times 1/1 = \text{[illegible]}$

$CB = (1 + 2.5 + \text{[illegible]}) \times 1/1 = \text{[illegible]}$

$AB = 1$

Nod A:



$FD = 1$

$ED = 1$

$DC = (2+1) \times 1 = 3$

$CA = (1 + 3 + \text{[illegible]}) = \text{[illegible]}$

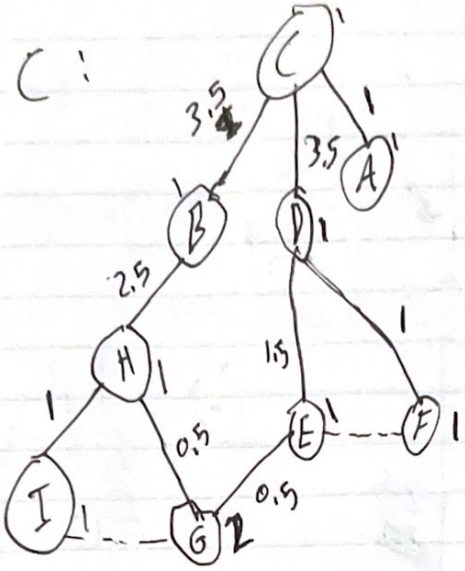
$GH = 1$

$IH = 1$

$HB = (1+1) = 3$

$BA = 4$

Node C:



GE = 1/2 = 0.5

GH = 1/2 = 0.5

ED = 1.5

FD = 1

DC = (1 + 1.5 + 1) = 3.5

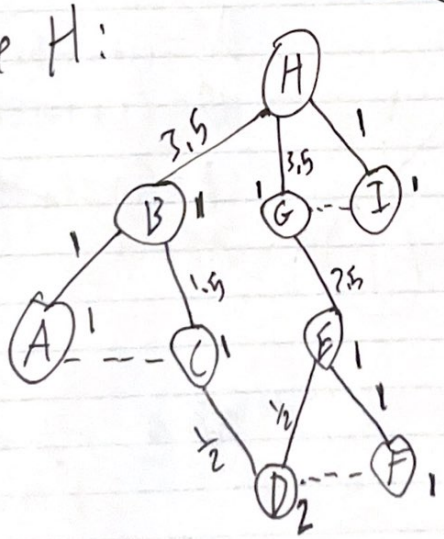
AC = 1

~~GH~~ IH = 1

HB = 1.5 + 1 = 2.5

BC = 3.5

Node H:



FE = 1

DE = 1/2

DC = 1/2

CB = 1 + 0.5 = 1.5

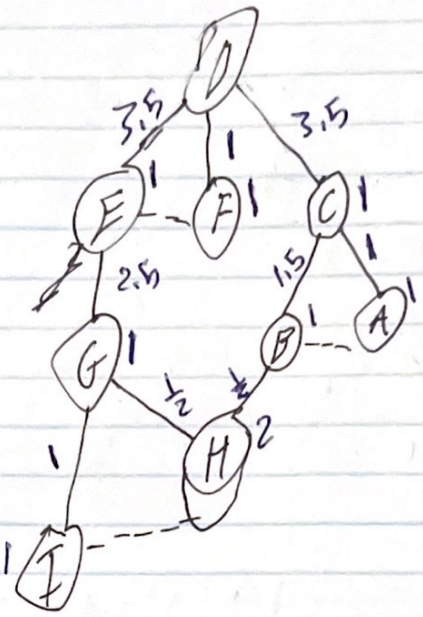
AB = 1

BH = 2.5 + 1 = 3.5

EG = 1 + 1 + 0.5 = 2.5

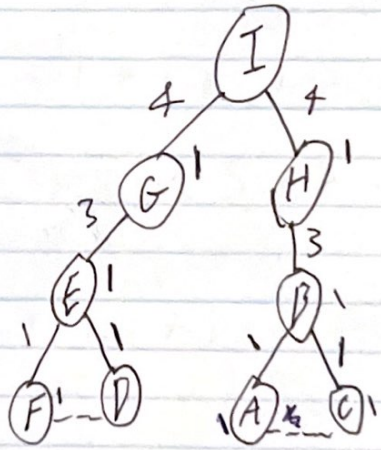
GH = 3.5

Node D:



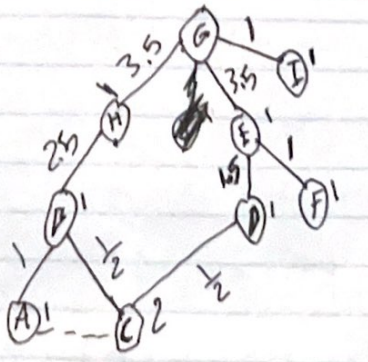
FD = 1
IG = 1
HG = 1/2
GE = 1+1+1/2 = 2.5
ED = 1+2.5 = 3.5
AB = 1/2
BC = 1+1/2 = 1.5
AC = 1, CD = 1+1.5+1 = 3.5

Node I:



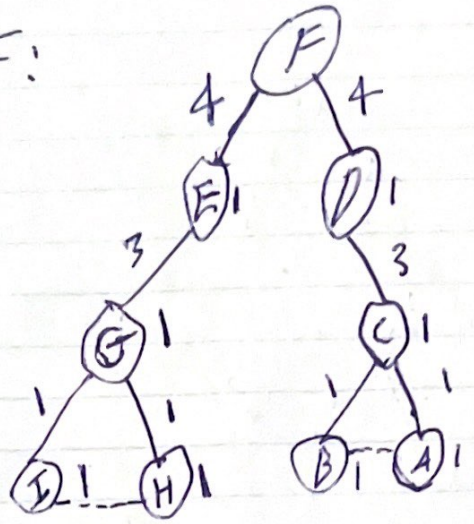
FE = 1
DE = 1
EG = 1+1+1 = 3
GI = 1+3 = 4
AB = 1
CB = 1
BH = 1+1+1 = 3
HI = 4

Node G:



CB = 1/2
AB = 1
BH = 1+1+1/2 = 2.5
HG = 1+2.5 = 3.5
IG = 1
CD = 1/2, DE = 1+1/2 = 1.5
EG = 1+1+1.5 = 3.5

Node F:



BC = (1/1)
AC = 1
CD = 1+1+1 x 1/1 = 3
DF = 1+3 x 1/1 = 4
HG = 1
IG = 1
GE = 1+1+1 = 3
EF = 1+3 = 4

Sums: FD = 4+1+1+1+1 = 8/2 = 4

FE = 4+1+1+1 = 7/2 = 3.5

GE = 3+3.5+3+2.5+0.5+2.5+0.5 = 15.5/2 = 7.75

ED = 3.5+1+1.5+1+0.5+1.5+0.5 = 9.5/2 = 4.75

CD = (3+0.5+3.5+3.5+0.5+2.5+3)/2 = 8.25

BC = 1+0.5+1+1.5+3.5+3.5+3.5 = 14.5/2 = 7.25

AC = 1+1+4+1 = 7/2 = 3.5

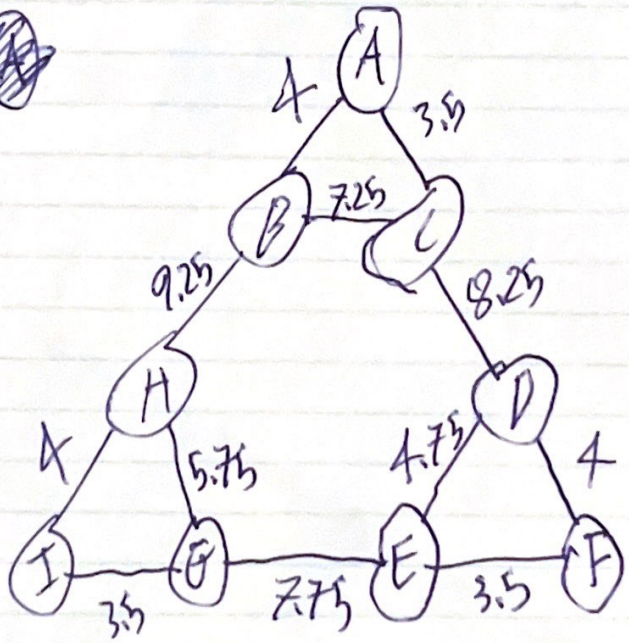
AD = 1+1+1+1+4 = 8/2 = 4

HG = 1+3.5+0.5+0.5+3.5+1.5+1 = 11.5/2 = 5.75

$HI = 4+1+1+1+1 = 8/2 = 4$

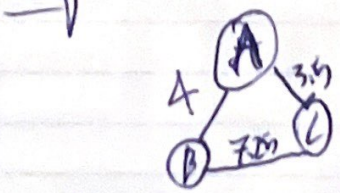
$HB = 2.5+3.5+3.5+3+0.5+3+2.5 = 18.5/2 = 9.25$

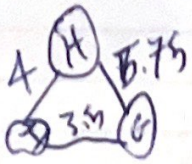
$GI = 1+1+4+1 = 7/2 = 3.5$

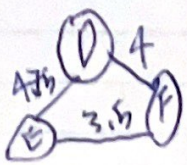


⇒ Remove highest edge betweeness 9.25, then 8.25, then 7.75

⇒







⇒ Therefore, the resulted communities are [['A', 'B', 'C'], ['H', 'I', 'G'], ['D', 'F', 'E']].