Soru 1)

entropysi hesaplanır, Gini index i hesaplanır, misclassification

homojen nodun entropysi 0 olur.

information criteria
↓
bilgi kriteri

Soru 2)

x_1	x_2	x_3	$f(x_1,x_2,x_3)$
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

Hepsi 0

1 sınıf var

Soru 3)

- selection
- crossover
- mutation

Population size
Fitness
generation sayısı

crossover ağırlıkları
cressover şansı

mutation rate
mutasyon şansı

popülasyon sal → en iyileri al → çocukları üret
↓
tekrar et

Soru 4)

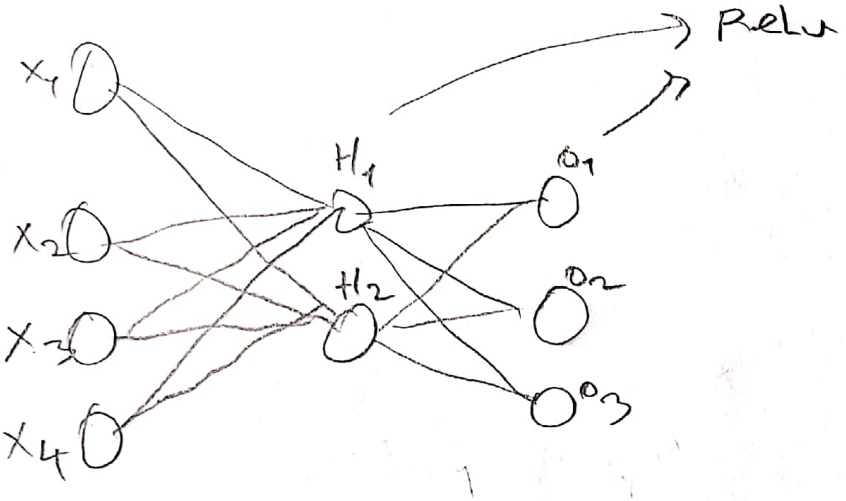
$n = 100.000$

eğitim
$e = 0.6$ → 60.000

train
$t = 0.4$ → 40.000

Validation = 0.0

$$X = \begin{bmatrix} -1 \\ 0.5 \\ 2 \\ -1 \end{bmatrix} \quad W_1 = \begin{bmatrix} 0.5 & 2 & 0.1 & 1.5 \\ 1 & 4 & 0.75 & 1 \end{bmatrix} \quad W_2 = \begin{bmatrix} 2.5 & 1.25 \\ 2 & 1 \\ 1 & 1.5 \end{bmatrix}$$



$H_1 = (-1 \times 0.5) + (0.5 \times 2) + (2 \times 0.1) + (-1 \times 1.5) + 0 = (-0.8)_{ReLu} \Rightarrow 0$

$H_2 = (-1 \times 1) + (0.5 \times 4) + (2 \times 0.75) + (-1 \times 1) + 0 = (1.5)_{ReLu} \Rightarrow 1.5$

$O_1 = (0 \times 2.5) + (1.5 \times 1.25) + 0 = (1.875)_R \Rightarrow 1.875$

$O_2 = (0 \times 2) + (1.5 \times 1) + 0 = (1.5)_R \Rightarrow 1.5$

$O_3 = (0 \times 1) + (1.5 \times 1.5) + 0 = (2.25)_R \Rightarrow 2.25$ //

$R = ReLU$

Soru NO 5 //