

Question # 2

Attributes :-

Hair, FShape, FColor, Eyes, Nose, ~~Smile~~
Smile
↓
Target variable

Training Data :-

- $d_1 = \langle \text{Yes, Circle, Pink, Circle, Triangle} \rangle +$
- $d_2 = \langle \text{Yes, Square, Green, Square, Square} \rangle -$
- $d_3 = \langle \text{Yes, Circle, Yellow, Square, Triangle} \rangle +$
- $d_4 = \langle \text{No, Circle, Green, Circle, Triangle} \rangle -$
- $d_5 = \langle \text{Yes, Circle, Yellow, Square, Square} \rangle +$

Find-S Algorithm :-

$$h_0 = \langle \phi, \phi, \phi, \phi, \phi \rangle$$

$$h_1 = \langle Y, C, P, C, T \rangle$$

$$h_2 = \langle Y, C, ?, ?, T \rangle$$

$$h_3 = \langle Y, C, ?, ?, ? \rangle$$

The trained model will have a

$$h_3: \langle Y, C, ?, ?, ? \rangle.$$