



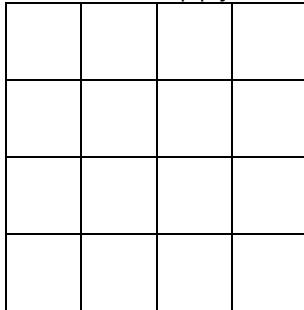
Digital Mirror

Am I friend or foe?

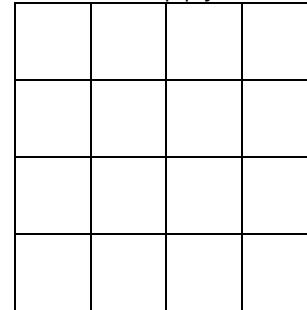
How does a Computer See

Exercise 1: Happy Time

Sketch a Happy face



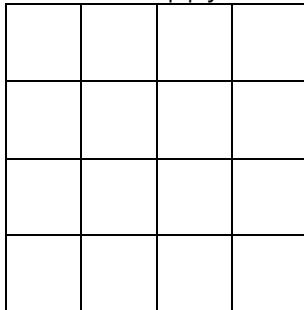
Write a Happy face as 0 and 1s



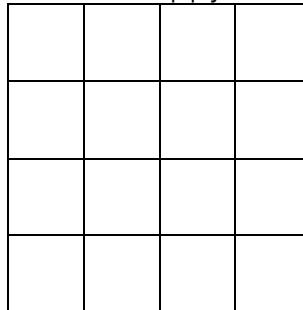
Exercise 2: Happy times Happy

2.1 Multiply Happy by Happy

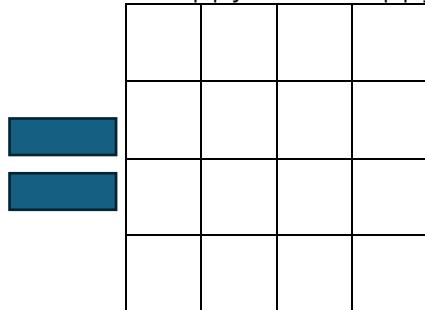
Happy



Happy



Happy times Happy



2.2 What does Happy times Happy equals

Add all the numbers together.

2.3 Happy \times Happy =

Exercise 3: Sad Time

Sketch a sad face

Write a sad face as numbers

Exercise 3: Sad times Sad

3.1 Multiply Sad by Sad

Sad



Sad

Sad times Sad

3.2 What does Sad times Sad equals

Add all the numbers together.

3.3 Sad x Sad =

Exercise 4: Happy and Sad Times

4.1 Multiply Happy by Sad

Happy



Sad

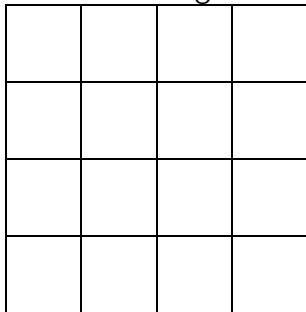
Happy times Sad

4.2 What does Sad times Equal equals

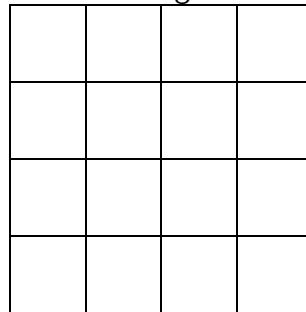
4.3 Happy x Sad =

Exercise 5: Delighted Time

Sketch a Delighted face



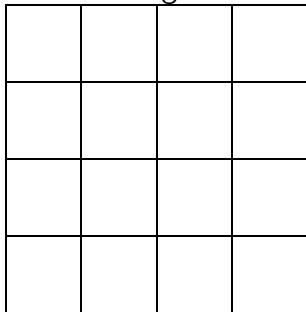
Write a Delighted face as numbers



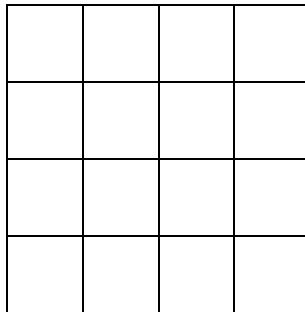
Exercise 6: Comparing Faces

Exercise 6.1: Delighted times Sad

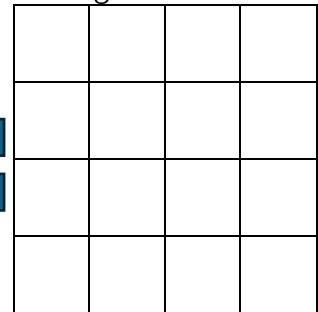
Delighted



Sad



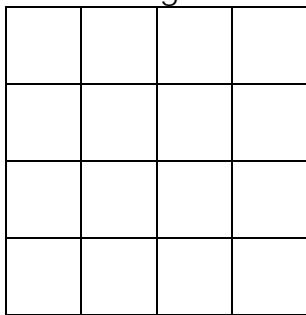
Delighted times Sad



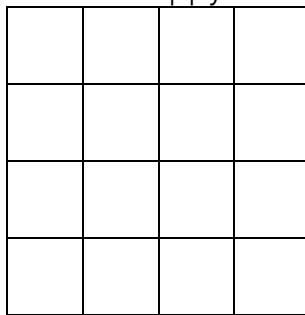
6.2: Delighted x Sad =

Exercise 6.3: Delighted times Happy

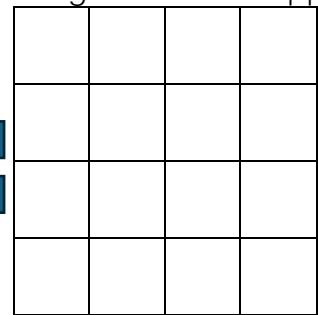
Delighted



Happy

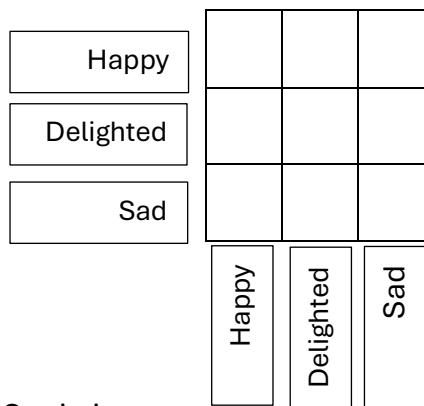


Delighted times Happy



6.4 Delighted x Happy =

Exercise 7: Similarity of Faces



Going from 2D to 1D

