

## Evaluation Metrics:

$$\text{Forgeries Test Accuracy} = \frac{\text{True\_forgeries}}{\text{True\_forgeries} + \text{False\_forgeries}}$$

$$\text{Genuine Test Accuracy} = \frac{\text{True\_genuines}}{\text{True\_genuines} + \text{False\_genuines}}$$

$$\text{Total Accuracy} = \frac{\text{True\_genuines} + \text{True\_forgeries}}{\text{Total\_test\_signature}}$$

## Unseen random forgeries-writer signature test results:

**Forgeries Test Accuracy: 92.5% = 37/40**

**Genuine Test Accuracy: 100% = 20/20**

**Total Accuracy: 95% = 57/60**

### User1

Training accuracy: 100.0000%

TestF1 predictions: [0 0] True

TestF2 predictions: [1 0 0 0 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0] True

TestF3 predictions: [0 0] True

TestF4 predictions: [1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0] True

TestG1 predictions: [1 1] True

TestG2 predictions: [1 1] True

Test overall accuracy: 93.1818%

### User2

Training accuracy: 100.0000%

TestF1 predictions: [0 0] True

TestF2 predictions: [0 0] True

TestF3 predictions: [1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1] False

TestF4 predictions: [0 1 0 0 1 1 1 1 0 0 0 1 0 0 1 0 0 0 0 0 1 0] True (14-8)

TestG1 predictions: [1 1] True

TestG2 predictions: [1 1] True

Test overall accuracy: 78.7879%

### User3

Training accuracy: 98.7461%

TestF1 predictions: [0 0 1 1 1 0 0 0 1 0 0 0 1 0 1 1 0 0 0 1 0 0] True (14-8)

TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0] True

TestF3 predictions: [0 0] True

TestF4 predictions: [0 0] True  
TestG1 predictions: [1 1] True  
TestG2 predictions: [0 1 1 1 1 1 1 0 1 0 0 1 1 1 1 1 0 0 1 1 1 1] True  
Test overall accuracy: 91.0606%

#### User4

Training accuracy: 96.1039%  
TestF1 predictions: [0 1] True  
TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 1 0 0 0 0] True  
TestF3 predictions: [0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 1 0 0] True  
TestF4 predictions: [0 0] True  
TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 0 1 1 1] True  
TestG2 predictions: [1 1] True  
Test overall accuracy: 92.4242%

#### User5

Training accuracy: 99.7543%  
TestF1 predictions: [1 0 1 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 1 0] True  
TestF2 predictions: [1 1 1 0 1 1 0 1 0 0 1 0 1 1 0 1 1 1 1 1 1 1] False  
TestF3 predictions: [0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0] True  
TestF4 predictions: [0 0] True  
TestG1 predictions: [1 1] True  
TestG2 predictions: [1 1] True  
Test overall accuracy: 81.8182%

#### User6

Training accuracy: 100.0000%  
TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0] True  
TestF2 predictions: [0 0 0 1 0 0 0 1 1 1 1 1 0 0 0 1 1 0 0 1 1 0] True (12-10)  
TestF3 predictions: [0 0 0 0 0 0 0 1 1 1 1 1 0 0 0 1 1 0 0 1 0 1] True (13-9)  
TestF4 predictions: [0 0] True  
TestG1 predictions: [1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1] True  
TestG2 predictions: [1 1] True  
Test overall accuracy: 84.0909%

#### User7

Training accuracy: 100.0000%  
TestF1 predictions: [0 0] True  
TestF2 predictions: [0 0] True  
TestF3 predictions: [0 0] True  
TestF4 predictions: [0 0] True  
TestG1 predictions: [1 1] True  
TestG2 predictions: [1 1] True  
Test overall accuracy: 100.0000%

### User8

Training accuracy: 99.3939%

TestG1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] True  
TestG2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] True  
TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] True  
TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] True  
TestF3 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1] True  
TestF4 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1] True  
Test overall accuracy: 100.0000%

### User9

Training accuracy: 99.7543%

TestF1 predictions: [0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0] True  
TestF2 predictions: [0 0] True  
TestF3 predictions: [0 0] True  
TestF4 predictions: [0 0] True  
TestG1 predictions: [1 1 1 1 1 0 1 0 0 0 1 0 1 1 1 1 1 1 1 1 1] True  
TestG2 predictions: [1 1] True  
Test overall accuracy: 94.6970%

### User10

Training accuracy: 99.1429%

TestF1 predictions: [1 1 1 1 1 0 0 0 0 1 1 1 0 0 1 1 0 0 1 1] False  
TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] True  
TestF3 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 1 0] True  
TestF4 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] True  
TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1] True  
TestG2 predictions: [1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1] True  
Test overall accuracy: 85.8333%

## Others forgeries-writer signature test results:

All:

Forgeries Test Accuracy: 93.3% = 56/60

Genuine Test Accuracy: 100% = 20/20

Total Accuracy: 95% = 76/80

Worst:

Forgeries Test Accuracy: 95% = 38/40

Genuine Test Accuracy: 100% = 20/20

Total Accuracy: 96.7% = 58/60

Middle:

Forgeries Test Accuracy: 85% = 34/40

Genuine Test Accuracy: 100% = 20/20

Total Accuracy: 90% = 54/60

Best:

Forgeries Test Accuracy: 77.5% = 31 /40

Genuine Test Accuracy: 100% = 20/20

Total Accuracy: 85% = 51/60

User1

All:

Training accuracy: 100.0000%

TestF1 predictions: [0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0]

TestF2 predictions: [1 0 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 0 1 1]

TestF3 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestF4 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

Test overall accuracy: 85.6061%

Worst:

TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestF2 predictions: [1 0 0 0 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 0]

TestF3 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestF4 predictions: [1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 0]

TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

Middle:

TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestF2 predictions: [1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 1 0 0]

TestF3 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestF4 predictions: [1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 0]

TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

Best:

TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestF2 predictions: [1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 0]

TestF3 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestF4 predictions: [1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 0 0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

## User2

### All:

TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0]  
TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 1 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0]  
TestF5 predictions: [0 0]  
TestF6 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

### Worst:

TestF1 predictions: [0 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

### Middle:

TestF1 predictions: [0 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1]  
TestF4 predictions: [0 1 0 0 1 1 1 1 0 0 0 1 0 0 1 0 0 0 0 0 1 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

### Best:

TestF1 predictions: [0 1 0 0 1 0 0 1 0 0 0 0 0 0 1 1 0 0 0 0 1 0]  
TestF2 predictions: [0 1 1 0 1 1 0 1 0 0 1 1 1 1 1 1 1 0 1 1 1 0]  
TestF3 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 1 0]  
TestF4 predictions: [0 1 1 0 1 0 0 1 0 0 0 0 1 0 1 1 1 0 0 1 1 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

## User3

### All:

TestF1 predictions: [0 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [0 0]

TestF4 predictions: [0 0]  
TestF5 predictions: [0 0]  
TestF6 predictions: [0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 1 1 0 0 0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0]

**Worst:**

TestF1 predictions: [0 0 1 1 1 0 0 0 1 0 0 0 0 0 1 1 0 0 0 1 0 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0]

**Middle:**

TestF1 predictions: [0 0 1 1 1 0 0 0 1 0 0 0 0 0 1 1 0 0 0 1 0 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0]

**Best:**

TestF1 predictions: [0 0 1 1 1 0 0 0 1 0 0 0 0 0 1 1 0 0 0 1 0 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0]

**User4**

**All:**

TestF1 predictions: [1 1]  
TestF2 predictions: [1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 1 1]  
TestF3 predictions: [1 0 1 1 0 0 0 0 0 0 0 1 1 0 0 1 1 1 0 0 1 1]  
TestF4 predictions: [0 1 1]  
TestF5 predictions: [0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 1 1]  
TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1]  
TestG2 predictions: [1 1]

**Worst:**

TestF1 predictions: [0 0]  
TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1 1 1 0 0 0 0]  
TestF3 predictions: [1 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1 1 1 0 0 1]

TestF4 predictions: [0 0]  
TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 1 0 1 1 1]  
TestG2 predictions: [1 1]

**Middle:**

TestF1 predictions: [0 0]  
TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 1 0 0 0]  
TestF3 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 1 1 0 0 1]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 1 0 1 1 1]  
TestG2 predictions: [1 1]

**Best:**

TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 1 1 0 0 1]  
TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 1 1 0 0 1]  
TestF3 predictions: [1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1]  
TestF4 predictions: [1 1 1 1 1 1 1 1 1 0 0 0 0 0 1 1 0 1 0 0 1 1]  
TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 1 0 1 1 1]  
TestG2 predictions: [1 1]

**User5**

**All:**

TestF1 predictions: [0 0 1 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 1 0]  
TestF2 predictions: [0 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 0 0 0 0 1 1 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0]  
TestF5 predictions: [0 0]  
TestF6 predictions: [0 1 0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

**Worst:**

TestF1 predictions: [1 0 1 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 1 0]  
TestF2 predictions: [1 1 1 0 1 1 0 1 0 0 1 0 0 1 0 1 1 1 1 1 1 1 1]  
TestF3 predictions: [0 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

**Middle:**

TestF1 predictions: [1 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 1 0]  
TestF2 predictions: [1 1 1 0 1 1 0 1 0 0 1 0 1 1 1 1 1 1 1 1 1 1]  
TestF3 predictions: [0 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0]  
TestF4 predictions: [0 0]

TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

**Best:**

TestF1 predictions: [1 0 1 0 1 0 0 1 0 0 1 0 0 0 0 0 0 1 0 0 1 0]  
TestF2 predictions: [1 1 1 0 1 1 0 1 0 0 1 0 0 1 0 1 1 1 1 1 1 0]  
TestF3 predictions: [0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

**User6**

**All:**

TestF1 predictions: [1 1]  
TestF2 predictions: [0 0 0 1 0 0 1 1 0 0 0 0 0 0 0 1 1 0 0 0 0 0]  
TestF3 predictions: [0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0]  
TestF4 predictions: [0 0]  
TestF5 predictions: [0 0]  
TestF6 predictions: [0 0 0 0 0 1 1 0 0 0 0 0 1 0 0 0 0 0 0 0 1 1]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

**Worst:**

TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0] True  
TestF2 predictions: [0 0 0 1 0 0 0 1 1 1 1 1 0 0 0 1 1 0 0 1 1 0] True (12-10)  
TestF3 predictions: [0 0 0 0 0 0 0 1 1 1 1 1 0 0 0 1 1 0 0 1 0 1] True (13-9)  
TestF4 predictions: [0 0] True  
TestG1 predictions: [1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1] True  
TestG2 predictions: [1 1] True

**Middle:**

TestF1 predictions: [0 0]  
TestF2 predictions: [0 0 0 1 0 0 1 1 1 1 1 1 0 0 0 1 1 0 0 1 1 0]  
TestF3 predictions: [0 0 0 0 0 0 1 1 1 1 1 1 0 0 0 1 1 0 0 1 0 1]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1]  
TestG2 predictions: [1 1]

**Best:**

TestF1 predictions: [1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1]  
TestF2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1]  
TestF3 predictions: [0 0 0 0 0 0 1 1 1 1 1 1 0 0 0 1 1 0 0 1 0 1]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]



TestG2 predictions: [1 1]

## User7

### All:

TestF1 predictions: [0 0]

TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0]

TestF3 predictions: [1 1]

TestF4 predictions: [0 0]

TestF5 predictions: [0 0]

TestF6 predictions: [0 0]

TestG1 predictions: [1 1]

TestG2 predictions: [1 1]

### Worst:

TestF1 predictions: [0 0]

TestF2 predictions: [0 0]

TestF3 predictions: [0 0]

TestF4 predictions: [0 0]

TestG1 predictions: [1 1]

TestG2 predictions: [1 1]

### Middle:

TestF1 predictions: [1 1]

TestF2 predictions: [0 0 1 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0]

TestF3 predictions: [0 0]

TestF4 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 1 0]

TestG1 predictions: [1 1]

TestG2 predictions: [1 1]

### Best:

TestF1 predictions: [0 0]

TestF2 predictions: [0 0 1 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0]

TestF3 predictions: [1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1]

TestF4 predictions: [1 1]

TestG1 predictions: [1 1]

TestG2 predictions: [1 1]

## User8

### All:

TestF1 predictions: [0 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0]

TestF2 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0]

TestF3 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0]

TestF4 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0]

TestF5 predictions: [0 0]

TestF6 predictions: [0 0 1 0 1 0 0 0 0 0 1 1 1 0 0 1 1 1 0 0 0 1]  
TestG1 predictions: [1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1]  
TestG2 predictions: [1 1]

**Worst:**

TestF1 predictions: [0 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

**Middle:**

TestF1 predictions: [0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0]  
TestF2 predictions: [0 0 1 0 1 0 0 0 0 0 1 0 1 0 0 0 1 0 0 0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0 1 0 1 1 0 0 0 0 1 1 1 1 0 0 1 1 0 0 1]  
TestF5 predictions: [1 1]  
TestF6 predictions: [1 1]

**Best:**

TestF1 predictions: [0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0]  
TestF2 predictions: [0 0 1 0 1 0 0 0 0 0 1 0 1 0 0 0 1 0 0 0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0 1 0 1 1 0 0 0 0 1 1 1 1 0 0 1 1 0 1 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

**User9**

**All:**

TestF1 predictions: [0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0]  
TestF2 predictions: [1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0 0 1 0 1 0 1 1 1 1 0 1 1 0 0 0 1 0 0 0]  
TestF5 predictions: [0 0]  
TestF6 predictions: [0 0 0 0 0 1 0 1 1 1 0 1 1 0 0 0 0 0 0 1 0]  
TestG1 predictions: [1 1 1 1 1 0 1 0 0 0 1 0 1 1 1 1 1 1 1 1 1]  
TestG2 predictions: [1 1]

**Worst:**

TestF1 predictions: [0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0]

TestG1 predictions: [1 1 1 1 1 0 1 0 0 0 1 1 1 1 1 1 1 1 1 1]  
TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

#### **Middle:**

TestF1 predictions: [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]  
TestF2 predictions: [1 0 1 1 0 0 0 0 1 1 1 0 1 1 0 1 0 1 0 0 0 0]  
TestF3 predictions: [0 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1 1 1 1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1]  
TestG2 predictions: [1 1]

#### **Best:**

TestF1 predictions: [1 1]  
TestF2 predictions: [0 0 1 0 0 0 0 0 0 1 1 0 1 0 0 1 0 0 0 0 0 0]  
TestF3 predictions: [0 1 0 0 0 0 0 0 0 1 1 0 1 0 0 1 0 1 0 1 0 1]  
TestF4 predictions: [1 0 1 0 0 1 0 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

#### **User10**

##### **All:**

TestF1 predictions: [0 0]  
TestF2 predictions: [0 0]  
TestF3 predictions: [1 1 1 0 1 1 1 0 0 0 1 1 0 0 0 0 0 0 1 0]  
TestF4 predictions: [0 0]  
TestF5 predictions: [0 0]  
TestF6 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1]

##### **Worst:**

TestF1 predictions: [1 1 1 1 1 0 0 1 0 1 1 1 0 0 1 1 0 0 1 1]  
TestF2 predictions: [0 0]  
TestF3 predictions: [1 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 1 0]  
TestF4 predictions: [0 0]  
TestG1 predictions: [1 1]  
TestG2 predictions: [1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1]

##### **Middle:**

TestF1 predictions: [1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1]  
TestF2 predictions: [1 0]  
TestF3 predictions: [1 0 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0]  
TestF4 predictions: [1 1]  
TestG1 predictions: [1 1]

TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

**Best:**

TestF1 predictions: [1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1]

TestF2 predictions: [1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]

TestF3 predictions: [1 0 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0]

TestF4 predictions: [1 0 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0]

TestG1 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]

TestG2 predictions: [1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1]