Calculating F-measure for each test carried out

Test 1

In [3]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(1)] + [1 for _ in range(9)]
pred_neg = [1 for _ in range(0)] + [0 for _ in range(10)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.947
```

Test 2

In [4]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(2)] + [1 for _ in range(8)]
pred_neg = [1 for _ in range(0)] + [0 for _ in range(10)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.889
```

Test 3

In [5]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(0)] + [1 for _ in range(10)]
pred_neg = [1 for _ in range(1)] + [0 for _ in range(9)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.952
```

Test 4

In [6]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(0)] + [1 for _ in range(10)]
pred_neg = [1 for _ in range(2)] + [0 for _ in range(8)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.909
```

Test 5

In [8]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(2)] + [1 for _ in range(8)]
pred_neg = [1 for _ in range(0)] + [0 for _ in range(10)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.889
```

Test 6

In [9]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(3)] + [1 for _ in range(7)]
pred_neg = [1 for _ in range(0)] + [0 for _ in range(10)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.824
```

Test 7

In [11]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(1)] + [1 for _ in range(9)]
pred_neg = [1 for _ in range(1)] + [0 for _ in range(9)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.900
```

Test 8

In [12]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(2)] + [1 for _ in range(8)]
pred_neg = [1 for _ in range(1)] + [0 for _ in range(9)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.842
```

Test 9

In [13]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(2)] + [1 for _ in range(8)]
pred_neg = [1 for _ in range(1)] + [0 for _ in range(9)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.842
```

Test 10

In [14]:

```
from sklearn.metrics import f1_score
# define actual
act_pos = [1 for _ in range(10)]
act_neg = [0 for _ in range(10)]
y_true = act_pos + act_neg
# define predictions
pred_pos = [0 for _ in range(2)] + [1 for _ in range(8)]
pred_neg = [1 for _ in range(3)] + [0 for _ in range(7)]
y_pred = pred_pos + pred_neg
# calculate score
score = f1_score(y_true, y_pred, average='binary')
print('F-Measure: %.3f' % score)
```

```
F-Measure: 0.762
```