--- K: 1 | test datum: {(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)} ---

training dataset:
((170, 57, 32), 'W')
((165, 60, 27), 'W')
((182, 80, 30), 'M')
((190, 95, 28), 'M')
((185, 90, 32), 'M')
((178, 80, 27), 'M')
((160, 50, 31), 'W')
((150, 45, 35), 'W')
((155, 48, 31), 'W')
((168, 65, 29), 'M')
((175, 69, 28), 'W')
((175, 78, 26), 'M')
((171, 65, 28), 'W')
((170, 72, 30), 'M')

Model accuracy is based on training data and 14 folds cross validations.
acc: [0.0, 100.0, 0.0, 100.0, 100.0, 0.0, 100.0, 100.0, 0.0, 100.0, 100.0, 100.0, 100.0, 100.0]
Overall model accuracy: 71.43 %

test dataset:
{(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)}

Calculate distances to datum: (175, 70, 30)

Training data XY	Distance
((170, 57, 32), 'W')	14.0712
((165, 60, 27), 'W')	14.4568
((182, 80, 30), 'M')	12.2066
((190, 95, 28), 'M')	29.2233
((185, 90, 32), 'M')	22.4499
((178, 80, 27), 'M')	10.8628
((160, 50, 31), 'W')	25.02
((150, 45, 35), 'W')	35.7071
((155, 48, 31), 'W')	29.7489
((168, 65, 29), 'M')	8.6603
((175, 69, 28), 'W')	2.2361
((175, 78, 26), 'M')	8.9443
((171, 65, 28), 'W')	6.7082
((170, 72, 30), 'M')	5.3852

1 Nearest Neighbors:
(((175, 69, 28), 'W'), 2.2361)

KNN classes: ['W']
Datum prediction: W

Calculate distances to datum: (180, 85, 29)

Training data XY | Distance |
_____|_____|
((170, 57, 32), 'W') | 29.8831
((165, 60, 27), 'W') | 29.2233
((182, 80, 30), 'M') | 5.4772
((190, 95, 28), 'M') | 14.1774
((185, 90, 32), 'M') | 7.6811
((178, 80, 27), 'M') | 5.7446
((160, 50, 31), 'W') | 40.3609
((150, 45, 35), 'W') | 50.3587
((155, 48, 31), 'W') | 44.699
((168, 65, 29), 'M') | 23.3238
((175, 69, 28), 'W') | 16.7929
((175, 78, 26), 'M') | 9.1104
((171, 65, 28), 'W') | 21.9545
((170, 72, 30), 'M') | 16.4317

1 Nearest Neighbors:
(((182, 80, 30), 'M'), 5.4772)

KNN classes: ['M']
Datum prediction: M

Calculate distances to datum: (168, 75, 32)
Training data XY | Distance |
_____|_____|
((170, 57, 32), 'W') | 18.1108
((165, 60, 27), 'W') | 16.0935
((182, 80, 30), 'M') | 15.0
((190, 95, 28), 'M') | 30.0
((185, 90, 32), 'M') | 22.6716
((178, 80, 27), 'M') | 12.2474
((160, 50, 31), 'W') | 26.2679
((150, 45, 35), 'W') | 35.1141
((155, 48, 31), 'W') | 29.9833
((168, 65, 29), 'M') | 10.4403
((175, 69, 28), 'W') | 10.0499
((175, 78, 26), 'M') | 9.6954
((171, 65, 28), 'W') | 11.1803
((170, 72, 30), 'M') | 4.1231

1 Nearest Neighbors:
(((170, 72, 30), 'M'), 4.1231)

KNN classes: ['M']
Datum prediction: M

Calculate distances to datum: (162, 53, 28)
Training data XY | Distance |
_____|_____|
((170, 57, 32), 'W') | 9.798
((165, 60, 27), 'W') | 7.6811

((182, 80, 30), 'M') | 33.6601
((190, 95, 28), 'M') | 50.4777
((185, 90, 32), 'M') | 43.7493
((178, 80, 27), 'M') | 31.4006
((160, 50, 31), 'W') | 4.6904
((150, 45, 35), 'W') | 16.0312
((155, 48, 31), 'W') | 9.1104
((168, 65, 29), 'M') | 13.4536
((175, 69, 28), 'W') | 20.6155
((175, 78, 26), 'M') | 28.2489
((171, 65, 28), 'W') | 15.0
((170, 72, 30), 'M') | 20.7123

1 Nearest Neighbors:
(((160, 50, 31), 'W'), 4.6904)

KNN classes: ['W']
Datum prediction: W

Summary:
k: 1
Test set: {(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)}
Predictions: ['W', 'M', 'M', 'W']
Precision: 4 sigfig
--- end of process ---

--- K: 3 | test datum: {(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)} ---

training dataset:
((170, 57, 32), 'W')
((165, 60, 27), 'W')
((182, 80, 30), 'M')
((190, 95, 28), 'M')
((185, 90, 32), 'M')
((178, 80, 27), 'M')
((160, 50, 31), 'W')
((150, 45, 35), 'W')
((155, 48, 31), 'W')
((168, 65, 29), 'M')
((175, 69, 28), 'W')
((175, 78, 26), 'M')
((171, 65, 28), 'W')
((170, 72, 30), 'M')

Model accuracy is based on training data and 14 folds cross validations.
acc: [100.0, 100.0, 0.0, 0.0, 0.0, 100.0, 100.0, 100.0, 100.0, 0.0, 100.0, 100.0, 100.0, 100.0]
Overall model accuracy: 71.43 %

test dataset:

{(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)}

Calculate distances to datum: (175, 70, 30)

Training data XY	Distance
((170, 57, 32), 'W')	14.0712
((165, 60, 27), 'W')	14.4568
((182, 80, 30), 'M')	12.2066
((190, 95, 28), 'M')	29.2233
((185, 90, 32), 'M')	22.4499
((178, 80, 27), 'M')	10.8628
((160, 50, 31), 'W')	25.02
((150, 45, 35), 'W')	35.7071
((155, 48, 31), 'W')	29.7489
((168, 65, 29), 'M')	8.6603
((175, 69, 28), 'W')	2.2361
((175, 78, 26), 'M')	8.9443
((171, 65, 28), 'W')	6.7082
((170, 72, 30), 'M')	5.3852

3 Nearest Neighbors:
(((175, 69, 28), 'W'), 2.2361)
(((170, 72, 30), 'M'), 5.3852)
(((171, 65, 28), 'W'), 6.7082)

KNN classes: ['W', 'M', 'W']
Datum prediction: W

Calculate distances to datum: (180, 85, 29)

Training data XY	Distance
((170, 57, 32), 'W')	29.8831
((165, 60, 27), 'W')	29.2233
((182, 80, 30), 'M')	5.4772
((190, 95, 28), 'M')	14.1774
((185, 90, 32), 'M')	7.6811
((178, 80, 27), 'M')	5.7446
((160, 50, 31), 'W')	40.3609
((150, 45, 35), 'W')	50.3587
((155, 48, 31), 'W')	44.699
((168, 65, 29), 'M')	23.3238
((175, 69, 28), 'W')	16.7929
((175, 78, 26), 'M')	9.1104
((171, 65, 28), 'W')	21.9545
((170, 72, 30), 'M')	16.4317

3 Nearest Neighbors:
(((182, 80, 30), 'M'), 5.4772)
(((178, 80, 27), 'M'), 5.7446)
(((185, 90, 32), 'M'), 7.6811)

KNN classes: ['M', 'M', 'M']

Datum prediction: M

Calculate distances to datum: (168, 75, 32)
Training data XY | Distance |
_____|_____|
((170, 57, 32), 'W') | 18.1108
((165, 60, 27), 'W') | 16.0935
((182, 80, 30), 'M') | 15.0
((190, 95, 28), 'M') | 30.0
((185, 90, 32), 'M') | 22.6716
((178, 80, 27), 'M') | 12.2474
((160, 50, 31), 'W') | 26.2679
((150, 45, 35), 'W') | 35.1141
((155, 48, 31), 'W') | 29.9833
((168, 65, 29), 'M') | 10.4403
((175, 69, 28), 'W') | 10.0499
((175, 78, 26), 'M') | 9.6954
((171, 65, 28), 'W') | 11.1803
((170, 72, 30), 'M') | 4.1231

3 Nearest Neighbors:
(((170, 72, 30), 'M'), 4.1231)
(((175, 78, 26), 'M'), 9.6954)
(((175, 69, 28), 'W'), 10.0499)

KNN classes: ['M', 'M', 'W']
Datum prediction: M

Calculate distances to datum: (162, 53, 28)
Training data XY | Distance |
_____|_____|
((170, 57, 32), 'W') | 9.798
((165, 60, 27), 'W') | 7.6811
((182, 80, 30), 'M') | 33.6601
((190, 95, 28), 'M') | 50.4777
((185, 90, 32), 'M') | 43.7493
((178, 80, 27), 'M') | 31.4006
((160, 50, 31), 'W') | 4.6904
((150, 45, 35), 'W') | 16.0312
((155, 48, 31), 'W') | 9.1104
((168, 65, 29), 'M') | 13.4536
((175, 69, 28), 'W') | 20.6155
((175, 78, 26), 'M') | 28.2489
((171, 65, 28), 'W') | 15.0
((170, 72, 30), 'M') | 20.7123

3 Nearest Neighbors:
(((160, 50, 31), 'W'), 4.6904)
(((165, 60, 27), 'W'), 7.6811)
(((155, 48, 31), 'W'), 9.1104)

KNN classes: ['W', 'W', 'W']

Datum prediction: W

Summary:
k: 3
Test set: {(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)}
Predictions: ['W', 'M', 'M', 'W']
Precision: 4 sigfig
--- end of process ---

--- K: 5 | test datum: {(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)} ---

training dataset:
((170, 57, 32), 'W')
((165, 60, 27), 'W')
((182, 80, 30), 'M')
((190, 95, 28), 'M')
((185, 90, 32), 'M')
((178, 80, 27), 'M')
((160, 50, 31), 'W')
((150, 45, 35), 'W')
((155, 48, 31), 'W')
((168, 65, 29), 'M')
((175, 69, 28), 'W')
((175, 78, 26), 'M')
((171, 65, 28), 'W')
((170, 72, 30), 'M')

Model accuracy is based on training data and 14 folds cross validations.
acc: [100.0, 0.0, 100.0, 100.0, 100.0, 100.0, 100.0, 100.0, 100.0, 0.0, 100.0, 100.0, 100.0, 100.0]
Overall model accuracy: 85.71 %

test dataset:
{(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)}

Calculate distances to datum: (175, 70, 30)
Training data XY | Distance |
_____|_____|
((170, 57, 32), 'W') | 14.0712
((165, 60, 27), 'W') | 14.4568
((182, 80, 30), 'M') | 12.2066
((190, 95, 28), 'M') | 29.2233
((185, 90, 32), 'M') | 22.4499
((178, 80, 27), 'M') | 10.8628
((160, 50, 31), 'W') | 25.02
((150, 45, 35), 'W') | 35.7071
((155, 48, 31), 'W') | 29.7489
((168, 65, 29), 'M') | 8.6603
((175, 69, 28), 'W') | 2.2361

((175, 78, 26), 'M') | 8.9443
((171, 65, 28), 'W') | 6.7082
((170, 72, 30), 'M') | 5.3852

5 Nearest Neighbors:
(((175, 69, 28), 'W'), 2.2361)
(((170, 72, 30), 'M'), 5.3852)
(((171, 65, 28), 'W'), 6.7082)
(((168, 65, 29), 'M'), 8.6603)
(((175, 78, 26), 'M'), 8.9443)

KNN classes: ['W', 'M', 'W', 'M', 'M']
Datum prediction: M

Calculate distances to datum: (180, 85, 29)

Training data XY	Distance
((170, 57, 32), 'W')	29.8831
((165, 60, 27), 'W')	29.2233
((182, 80, 30), 'M')	5.4772
((190, 95, 28), 'M')	14.1774
((185, 90, 32), 'M')	7.6811
((178, 80, 27), 'M')	5.7446
((160, 50, 31), 'W')	40.3609
((150, 45, 35), 'W')	50.3587
((155, 48, 31), 'W')	44.699
((168, 65, 29), 'M')	23.3238
((175, 69, 28), 'W')	16.7929
((175, 78, 26), 'M')	9.1104
((171, 65, 28), 'W')	21.9545
((170, 72, 30), 'M')	16.4317

5 Nearest Neighbors:
(((182, 80, 30), 'M'), 5.4772)
(((178, 80, 27), 'M'), 5.7446)
(((185, 90, 32), 'M'), 7.6811)
(((175, 78, 26), 'M'), 9.1104)
(((190, 95, 28), 'M'), 14.1774)

KNN classes: ['M', 'M', 'M', 'M', 'M']
Datum prediction: M

Calculate distances to datum: (168, 75, 32)

Training data XY	Distance
((170, 57, 32), 'W')	18.1108
((165, 60, 27), 'W')	16.0935
((182, 80, 30), 'M')	15.0
((190, 95, 28), 'M')	30.0
((185, 90, 32), 'M')	22.6716
((178, 80, 27), 'M')	12.2474
((160, 50, 31), 'W')	26.2679

((150, 45, 35), 'W') | 35.1141
((155, 48, 31), 'W') | 29.9833
((168, 65, 29), 'M') | 10.4403
((175, 69, 28), 'W') | 10.0499
((175, 78, 26), 'M') | 9.6954
((171, 65, 28), 'W') | 11.1803
((170, 72, 30), 'M') | 4.1231

5 Nearest Neighbors:
(((170, 72, 30), 'M'), 4.1231)
(((175, 78, 26), 'M'), 9.6954)
(((175, 69, 28), 'W'), 10.0499)
(((168, 65, 29), 'M'), 10.4403)
(((171, 65, 28), 'W'), 11.1803)

KNN classes: ['M', 'M', 'W', 'M', 'W']
Datum prediction: M

Calculate distances to datum: (162, 53, 28)
Training data XY | Distance |
_____|_____|
((170, 57, 32), 'W') | 9.798
((165, 60, 27), 'W') | 7.6811
((182, 80, 30), 'M') | 33.6601
((190, 95, 28), 'M') | 50.4777
((185, 90, 32), 'M') | 43.7493
((178, 80, 27), 'M') | 31.4006
((160, 50, 31), 'W') | 4.6904
((150, 45, 35), 'W') | 16.0312
((155, 48, 31), 'W') | 9.1104
((168, 65, 29), 'M') | 13.4536
((175, 69, 28), 'W') | 20.6155
((175, 78, 26), 'M') | 28.2489
((171, 65, 28), 'W') | 15.0
((170, 72, 30), 'M') | 20.7123

5 Nearest Neighbors:
(((160, 50, 31), 'W'), 4.6904)
(((165, 60, 27), 'W'), 7.6811)
(((155, 48, 31), 'W'), 9.1104)
(((170, 57, 32), 'W'), 9.798)
(((168, 65, 29), 'M'), 13.4536)

KNN classes: ['W', 'W', 'W', 'W', 'M']
Datum prediction: W

Summary:
k: 5
Test set: {(175, 70, 30), (180, 85, 29), (168, 75, 32), (162, 53, 28)}
Predictions: ['M', 'M', 'M', 'W']
Precision: 4 sigfig
--- end of process ---

--- K: 1 | test datum: {(180, 85), (168, 75), (175, 70), (162, 53)} ---

training dataset:
((182, 80), 'M')
((171, 65), 'W')
((168, 65), 'M')
((178, 80), 'M')
((170, 57), 'W')
((160, 50), 'W')
((165, 60), 'W')
((155, 48), 'W')
((175, 78), 'M')
((170, 72), 'M')
((175, 69), 'W')
((185, 90), 'M')
((150, 45), 'W')
((190, 95), 'M')

Model accuracy is based on training data and 14 folds cross validations.
acc: [100.0, 100.0, 100.0, 0.0, 100.0, 100.0, 100.0, 100.0, 0.0, 0.0, 100.0, 100.0, 100.0, 100.0]
Overall model accuracy: 78.57 %

test dataset:
{(180, 85), (168, 75), (175, 70), (162, 53)}

Calculate distances to datum: (180, 85)
Training data XY | Distance |
_____________________|_____________|
((182, 80), 'M') | 5.3852
((171, 65), 'W') | 21.9317
((168, 65), 'M') | 23.3238
((178, 80), 'M') | 5.3852
((170, 57), 'W') | 29.7321
((160, 50), 'W') | 40.3113
((165, 60), 'W') | 29.1548
((155, 48), 'W') | 44.6542
((175, 78), 'M') | 8.6023
((170, 72), 'M') | 16.4012
((175, 69), 'W') | 16.7631
((185, 90), 'M') | 7.0711
((150, 45), 'W') | 50.0
((190, 95), 'M') | 14.1421

1 Nearest Neighbors:
(((182, 80), 'M'), 5.3852)

KNN classes: ['M']
Datum prediction: M

Calculate distances to datum: (168, 75)
Training data XY | Distance |
_____________________|_____________|
((182, 80), 'M') | 14.8661
((171, 65), 'W') | 10.4403
((168, 65), 'M') | 10.0
((178, 80), 'M') | 11.1803
((170, 57), 'W') | 18.1108
((160, 50), 'W') | 26.2488
((165, 60), 'W') | 15.2971
((155, 48), 'W') | 29.9666
((175, 78), 'M') | 7.6158
((170, 72), 'M') | 3.6056
((175, 69), 'W') | 9.2195
((185, 90), 'M') | 22.6716
((150, 45), 'W') | 34.9857
((190, 95), 'M') | 29.7321

1 Nearest Neighbors:
(((170, 72), 'M'), 3.6056)

KNN classes: ['M']
Datum prediction: M

Calculate distances to datum: (175, 70)
Training data XY | Distance |
_____________________|_____________|
((182, 80), 'M') | 12.2066
((171, 65), 'W') | 6.4031
((168, 65), 'M') | 8.6023
((178, 80), 'M') | 10.4403
((170, 57), 'W') | 13.9284
((160, 50), 'W') | 25.0
((165, 60), 'W') | 14.1421
((155, 48), 'W') | 29.7321
((175, 78), 'M') | 8.0
((170, 72), 'M') | 5.3852
((175, 69), 'W') | 1.0
((185, 90), 'M') | 22.3607
((150, 45), 'W') | 35.3553
((190, 95), 'M') | 29.1548

1 Nearest Neighbors:
(((175, 69), 'W'), 1.0)

KNN classes: ['W']
Datum prediction: W

Calculate distances to datum: (162, 53)
Training data XY | Distance |

_____|_____|
((182, 80), 'M') | 33.6006
((171, 65), 'W') | 15.0
((168, 65), 'M') | 13.4164
((178, 80), 'M') | 31.3847
((170, 57), 'W') | 8.9443
((160, 50), 'W') | 3.6056
((165, 60), 'W') | 7.6158
((155, 48), 'W') | 8.6023
((175, 78), 'M') | 28.178
((170, 72), 'M') | 20.6155
((175, 69), 'W') | 20.6155
((185, 90), 'M') | 43.566
((150, 45), 'W') | 14.4222
((190, 95), 'M') | 50.4777

1 Nearest Neighbors:
(((160, 50), 'W'), 3.6056)

KNN classes: ['W']
Datum prediction: W

Summary:
k: 1
Test set: {(180, 85), (168, 75), (175, 70), (162, 53)}
Predictions: ['M', 'M', 'W', 'W']
Precision: 4 sigfig
--- end of process ---

--- K: 3 | test datum: {(180, 85), (168, 75), (175, 70), (162, 53)} ---

training dataset:
((182, 80), 'M')
((171, 65), 'W')
((168, 65), 'M')
((178, 80), 'M')
((170, 57), 'W')
((160, 50), 'W')
((165, 60), 'W')
((155, 48), 'W')
((175, 78), 'M')
((170, 72), 'M')
((175, 69), 'W')
((185, 90), 'M')
((150, 45), 'W')
((190, 95), 'M')

Model accuracy is based on training data and 14 folds cross validations.
acc: [100.0, 100.0, 0.0, 100.0, 100.0, 100.0, 100.0, 0.0, 0.0, 100.0, 0.0, 100.0, 100.0, 100.0]
Overall model accuracy: 71.43 %

test dataset:
{(180, 85), (168, 75), (175, 70), (162, 53)}

Calculate distances to datum: (180, 85)
Training data XY | Distance |
_____|_____|
((182, 80), 'M') | 5.3852
((171, 65), 'W') | 21.9317
((168, 65), 'M') | 23.3238
((178, 80), 'M') | 5.3852
((170, 57), 'W') | 29.7321
((160, 50), 'W') | 40.3113
((165, 60), 'W') | 29.1548
((155, 48), 'W') | 44.6542
((175, 78), 'M') | 8.6023
((170, 72), 'M') | 16.4012
((175, 69), 'W') | 16.7631
((185, 90), 'M') | 7.0711
((150, 45), 'W') | 50.0
((190, 95), 'M') | 14.1421

3 Nearest Neighbors:
(((182, 80), 'M'), 5.3852)
(((178, 80), 'M'), 5.3852)
(((185, 90), 'M'), 7.0711)

KNN classes: ['M', 'M', 'M']
Datum prediction: M

Calculate distances to datum: (168, 75)
Training data XY | Distance |
_____|_____|
((182, 80), 'M') | 14.8661
((171, 65), 'W') | 10.4403
((168, 65), 'M') | 10.0
((178, 80), 'M') | 11.1803
((170, 57), 'W') | 18.1108
((160, 50), 'W') | 26.2488
((165, 60), 'W') | 15.2971
((155, 48), 'W') | 29.9666
((175, 78), 'M') | 7.6158
((170, 72), 'M') | 3.6056
((175, 69), 'W') | 9.2195
((185, 90), 'M') | 22.6716
((150, 45), 'W') | 34.9857
((190, 95), 'M') | 29.7321

3 Nearest Neighbors:
(((170, 72), 'M'), 3.6056)
(((175, 78), 'M'), 7.6158)

(((175, 69), 'W'), 9.2195)

KNN classes: ['M', 'M', 'W']
Datum prediction: M

Calculate distances to datum: (175, 70)
Training data XY | Distance |
_____|_____|
((182, 80), 'M') | 12.2066
((171, 65), 'W') | 6.4031
((168, 65), 'M') | 8.6023
((178, 80), 'M') | 10.4403
((170, 57), 'W') | 13.9284
((160, 50), 'W') | 25.0
((165, 60), 'W') | 14.1421
((155, 48), 'W') | 29.7321
((175, 78), 'M') | 8.0
((170, 72), 'M') | 5.3852
((175, 69), 'W') | 1.0
((185, 90), 'M') | 22.3607
((150, 45), 'W') | 35.3553
((190, 95), 'M') | 29.1548

3 Nearest Neighbors:
(((175, 69), 'W'), 1.0)
(((170, 72), 'M'), 5.3852)
(((171, 65), 'W'), 6.4031)

KNN classes: ['W', 'M', 'W']
Datum prediction: W

Calculate distances to datum: (162, 53)
Training data XY | Distance |
_____|_____|
((182, 80), 'M') | 33.6006
((171, 65), 'W') | 15.0
((168, 65), 'M') | 13.4164
((178, 80), 'M') | 31.3847
((170, 57), 'W') | 8.9443
((160, 50), 'W') | 3.6056
((165, 60), 'W') | 7.6158
((155, 48), 'W') | 8.6023
((175, 78), 'M') | 28.178
((170, 72), 'M') | 20.6155
((175, 69), 'W') | 20.6155
((185, 90), 'M') | 43.566
((150, 45), 'W') | 14.4222
((190, 95), 'M') | 50.4777

3 Nearest Neighbors:
(((160, 50), 'W'), 3.6056)
(((165, 60), 'W'), 7.6158)

(((155, 48), 'W'), 8.6023)

KNN classes: ['W', 'W', 'W']
Datum prediction: W

Summary:
k: 3
Test set: {(180, 85), (168, 75), (175, 70), (162, 53)}
Predictions: ['M', 'M', 'W', 'W']
Precision: 4 sigfig
--- end of process ---

--- K: 5 | test datum: {(180, 85), (168, 75), (175, 70), (162, 53)} ---

training dataset:
((182, 80), 'M')
((171, 65), 'W')
((168, 65), 'M')
((178, 80), 'M')
((170, 57), 'W')
((160, 50), 'W')
((165, 60), 'W')
((155, 48), 'W')
((175, 78), 'M')
((170, 72), 'M')
((175, 69), 'W')
((185, 90), 'M')
((150, 45), 'W')
((190, 95), 'M')

Model accuracy is based on training data and 14 folds cross validations.
acc: [100.0, 100.0, 100.0, 100.0, 0.0, 100.0, 0.0, 100.0, 100.0, 100.0, 100.0, 100.0, 100.0, 100.0]
Overall model accuracy: 85.71 %

test dataset:
{(180, 85), (168, 75), (175, 70), (162, 53)}

Calculate distances to datum: (180, 85)
Training data XY | Distance |
_____|_____|
((182, 80), 'M') | 5.3852
((171, 65), 'W') | 21.9317
((168, 65), 'M') | 23.3238
((178, 80), 'M') | 5.3852
((170, 57), 'W') | 29.7321
((160, 50), 'W') | 40.3113
((165, 60), 'W') | 29.1548
((155, 48), 'W') | 44.6542

((175, 78), 'M') | 8.6023
((170, 72), 'M') | 16.4012
((175, 69), 'W') | 16.7631
((185, 90), 'M') | 7.0711
((150, 45), 'W') | 50.0
((190, 95), 'M') | 14.1421

5 Nearest Neighbors:
(((182, 80), 'M'), 5.3852)
(((178, 80), 'M'), 5.3852)
(((185, 90), 'M'), 7.0711)
(((175, 78), 'M'), 8.6023)
(((190, 95), 'M'), 14.1421)

KNN classes: ['M', 'M', 'M', 'M', 'M']
Datum prediction: M

Calculate distances to datum: (168, 75)
Training data XY | Distance |
_____|_____|
((182, 80), 'M') | 14.8661
((171, 65), 'W') | 10.4403
((168, 65), 'M') | 10.0
((178, 80), 'M') | 11.1803
((170, 57), 'W') | 18.1108
((160, 50), 'W') | 26.2488
((165, 60), 'W') | 15.2971
((155, 48), 'W') | 29.9666
((175, 78), 'M') | 7.6158
((170, 72), 'M') | 3.6056
((175, 69), 'W') | 9.2195
((185, 90), 'M') | 22.6716
((150, 45), 'W') | 34.9857
((190, 95), 'M') | 29.7321

5 Nearest Neighbors:
(((170, 72), 'M'), 3.6056)
(((175, 78), 'M'), 7.6158)
(((175, 69), 'W'), 9.2195)
(((168, 65), 'M'), 10.0)
(((171, 65), 'W'), 10.4403)

KNN classes: ['M', 'M', 'W', 'M', 'W']
Datum prediction: M

Calculate distances to datum: (175, 70)
Training data XY | Distance |
_____|_____|
((182, 80), 'M') | 12.2066
((171, 65), 'W') | 6.4031
((168, 65), 'M') | 8.6023
((178, 80), 'M') | 10.4403

((170, 57), 'W') | 13.9284
((160, 50), 'W') | 25.0
((165, 60), 'W') | 14.1421
((155, 48), 'W') | 29.7321
((175, 78), 'M') | 8.0
((170, 72), 'M') | 5.3852
((175, 69), 'W') | 1.0
((185, 90), 'M') | 22.3607
((150, 45), 'W') | 35.3553
((190, 95), 'M') | 29.1548

5 Nearest Neighbors:
(((175, 69), 'W'), 1.0)
(((170, 72), 'M'), 5.3852)
(((171, 65), 'W'), 6.4031)
(((175, 78), 'M'), 8.0)
(((168, 65), 'M'), 8.6023)

KNN classes: ['W', 'M', 'W', 'M', 'M']
Datum prediction: M

Calculate distances to datum: (162, 53)
Training data XY | Distance |
_____|_____|
((182, 80), 'M') | 33.6006
((171, 65), 'W') | 15.0
((168, 65), 'M') | 13.4164
((178, 80), 'M') | 31.3847
((170, 57), 'W') | 8.9443
((160, 50), 'W') | 3.6056
((165, 60), 'W') | 7.6158
((155, 48), 'W') | 8.6023
((175, 78), 'M') | 28.178
((170, 72), 'M') | 20.6155
((175, 69), 'W') | 20.6155
((185, 90), 'M') | 43.566
((150, 45), 'W') | 14.4222
((190, 95), 'M') | 50.4777

5 Nearest Neighbors:
(((160, 50), 'W'), 3.6056)
(((165, 60), 'W'), 7.6158)
(((155, 48), 'W'), 8.6023)
(((170, 57), 'W'), 8.9443)
(((168, 65), 'M'), 13.4164)

KNN classes: ['W', 'W', 'W', 'W', 'M']
Datum prediction: W

Summary:
k: 5
Test set: {(180, 85), (168, 75), (175, 70), (162, 53)}
Predictions: ['M', 'M', 'M', 'W']

Precision: 4 sigfig
--- end of process ---