Coverage report: 53%

coverage.py v6.5.0, created at 2022-12-03 17:04 +0200

Module	statements	missing	excluded	branches	partial	coverage
project\KNN.py	85	33	0	46	4	58%
project\dataloader.py	18	18	0	0	0	0%
project\main.py	19	19	0	2	0	0%
project\testData.py	16	0	0	0	0	100%
project\test\KNN_test.py	13	0	0	0	0	100%
project\test__init__.py	0	0	0	0	0	100%
Total	**151**	**70**	**0**	**48**	**4**	**53%**

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Test that are run:

```python
def test_get_majority_neighbour_number(self):
    self.assertEqual(Knn.GetTheMajorityNeighbourNumber(TestData.DistListForADigitFour(),TestData.HundredFirstTrainLabels()),4)
```

test_get_majority_neighbout_number test that the function for determining witch digit it is based on the closest neighbours work.
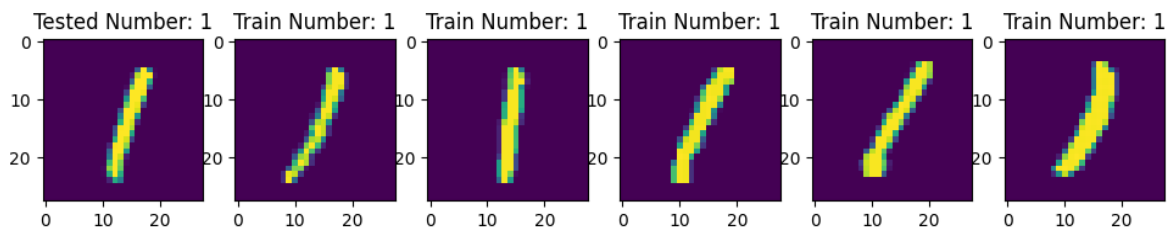
```python
def test_create_pixel_bool_coordinate_number(self):
    self.assertAlmostEqual(Knn.CreatePixelBoolCoordinateNumber(TestData.NumberData()),TestData.NumberPixelBoolData())
```

test_create_pixel_bool_number tests that the program correctly creates the book coordinate numbers

```python
def test_closest_coordinate_distance(self):
    coordinate = [23,12]
    self.assertEqual(Knn.GetClosestNeighbour(coordinate,TestData.BoolCordTableTrainDataEntryindex_nine_nine()),2)
```

test_closest_coordinate_distance test that the distance comparison works correctly

Manual test Output:

You can see the nearest neighbor that it recognises just by running the program