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5. Predicting the Test Data

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Project due Apr 5, 2023 08:59 -03 Completed

Now fill in the code for the function `predict`, which will use your trained neural network data.

You will be working in the file `part2-nn/neural_nets.py` in this problem

Implementing Predict

5.0/5.0 points (graded)

Available Functions: You have access to the NumPy python library as `np`, `rectified`
`output_layer_activation`

Note: Functions `rectified_linear_unit_derivative`, and `output_layer_activation` handle scalar input. You will need to use `np.vectorize` to use them

```
1 class NeuralNetwork(NeuralNetworkBase):
2
3     def predict(self, x1, x2):
4
5
6         input_values = np.matrix([[x1],[x2]])
7
8         # Compute output for a single input(should be same as the forward pass)
9         hidden_layer_weighted_input = np.dot(self.input_to_hidden_weights,
10        relu_vec = np.vectorize(rectified_linear_unit)
11        hidden_layer_activation = relu_vec(hidden_layer_weighted_input)
12        output = np.dot(self.hidden_to_output_weights, hidden_layer_activation)
13        activated_output = output_layer_activation(output)
14
15        return activated_output.item()
```

Press ESC then TAB or click outside of the code editor to exit



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