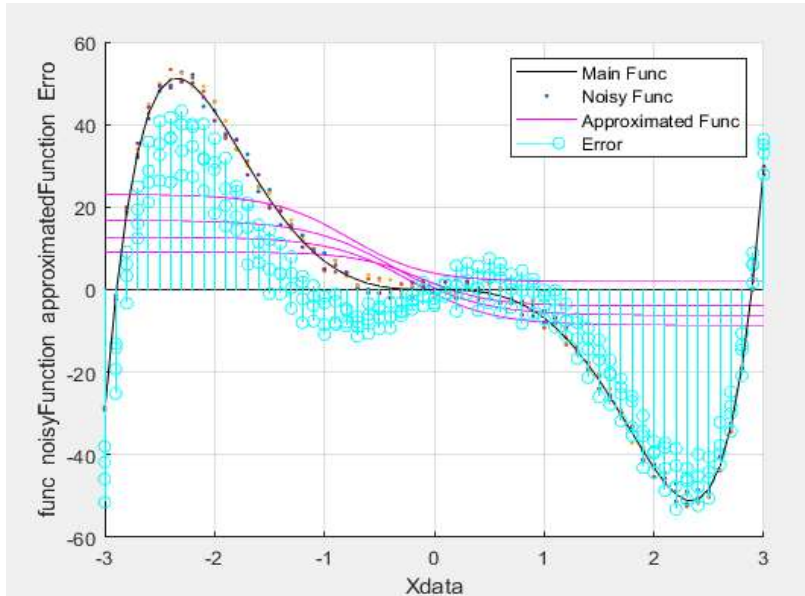


RESULTS:



Function approximation with WAVELETS in MATLAB involves graphical representation.

- Here, black line represents main function .
- Pink line represents approximated function.
- Blue points represents error.
- The dots around main function are considered as noise.

```
Input : 00 Predicted Output : 0.998725 Output : 0 error : -0.998725
Input : 11 Predicted Output : 0.999388 Output : 1 error : 0.000612443
Input : 10 Predicted Output : 0.998973 Output : 1 error : 0.00102651
Input : 01 Predicted Output : 0.999314 Output : 0 error : -0.999314
Input : 11 Predicted Output : 0.999388 Output : 1 error : 0.000612191
Input : 00 Predicted Output : 0.998726 Output : 0 error : -0.998726
Input : 10 Predicted Output : 0.998975 Output : 1 error : 0.00102544
Input : 11 Predicted Output : 0.999388 Output : 1 error : 0.000611775
Input : 10 Predicted Output : 0.998975 Output : 1 error : 0.00102544
Input : 00 Predicted Output : 0.998727 Output : 0 error : -0.998727
Input : 01 Predicted Output : 0.999315 Output : 0 error : -0.999315
Input : 10 Predicted Output : 0.998976 Output : 1 error : 0.00102437
Input : 00 Predicted Output : 0.998728 Output : 0 error : -0.998728
Input : 11 Predicted Output : 0.999389 Output : 1 error : 0.000610694
Input : 01 Predicted Output : 0.999316 Output : 0 error : -0.999316
Input : 11 Predicted Output : 0.99939 Output : 1 error : 0.000610443
Input : 00 Predicted Output : 0.99873 Output : 0 error : -0.99873
Input : 01 Predicted Output : 0.999317 Output : 0 error : -0.999317
Input : 10 Predicted Output : 0.998978 Output : 1 error : 0.00102223
Final hidden weights
[0.0663511.730388][0.6076850.802606]]
Final hidden biases
[1.3205791.201734]
Final output weights
[2.3099122.118421]]
Final output biases
[3.216240]
-----
Process exited after 4.388 seconds with return value 0
Press any key to continue . . .
```

```
- Warnings: 0
- Output Filename: C:\Users\ARCHANA MENDA\Desktop\wavelet.exe
- Output Size: 137.6572265625 KiB
- Compilation Time: 0.39s
```

Function approximation with MLPs in DEV C++ involves preparation, training an MLP to learn the function, and deploying the model for predictions, potentially fine-tuning for better accuracy.

Here error value is represented as difference between actual and predicted values based on MLP training by randomly providing input values.