Exercise 4

Chart, scatter chart

Description automatically generated

4)

Chart, scatter chart

Description automatically generated

Prediction: [1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, -1.0, 1.0, -1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0]

Ground truth: [1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0, -1.0]

Accuracy: 98.04%

The params are (axis, parity, threshold, alpha):

(0, -1, 5.8166955680635795, 0.23978654013094272)

(1, 1, 9.81368873515338, 0.371509505300059)

(1, -1, 6.486341656799706, 0.4172303568132614)

(1, 1, 9.673383820292312, 0.2616240718822737)

(1, 1, -6.062058911034066, 0.32924934627128966)

(0, -1, -9.882507964842981, 0.275625056647089)

(0, 1, -5.770514766179849, 0.389061199177036)

(1, 1, 9.97712362984208, 0.25457589899296745)

(1, -1, 5.336108599113114, 0.2812415201457475)

(1, 1, -4.722298227296321, 0.1761696783903768)

(1, 1, 9.881962811403582, 0.28243408477247933)

(1, -1, 6.563099159718732, 0.1972064966534169)

(1, 1, 9.809744528868674, 0.16442820438809147)

(1, 1, -6.236270921979383, 0.20727712106258353)

(1, 1, 9.80614332612802, 0.17133988821290308)

(0, -1, 5.822940253175801, 0.6462513152755265)

(1, 1, 9.831583446624684, 0.3124927895877521)

(1, -1, 6.703350347892247, 0.2514637063675152)

(0, 1, -5.597108253101929, 0.23578147367117192)

(1, 1, 9.991939871707402, 0.34420107523024857)