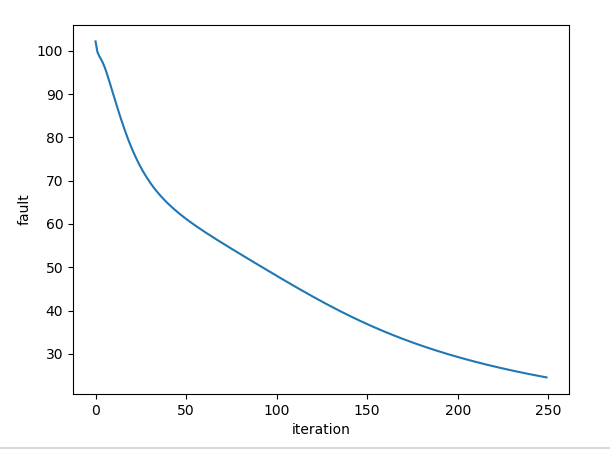
Bij deze opdracht heb ik een netwerk gebruikt met een structuur met 4 input nodes, 1 hidden layer met 8 nodes en 3 output nodes. With a hidden layer of 4 neurons it would learn very slowly.



Output:

STARTING NETWORK:

hidden layer 0:

rate of change: 0.5 bias: 0.28148273246185274 weigths:[ 0.76688207 0.48243087 0.24602919 -0.36326534] node number: 0 output\_node: False current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[-0.71703325 -0.31492515 0.3352379 0.81217895] node number: 1 output\_node: False current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[ 0.61372972 0.11590406 -0.714002 0.45198914] node number: 2 output\_node: False current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[ 0.18692052 -0.11503077 -0.9536142 0.68944083] node number: 3 output\_node: False current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[ 0.35287884 -0.80314485 0.51427878 0.41465291] node number: 4 output\_node: False current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[ 0.01003593 -0.87192621 -0.87254504 -0.70475187] node number: 5 output\_node: False current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[-0.39242543 0.93765189 -0.33603105 0.99385378] node number: 6 output\_node: False current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[-0.17535262 0.75424656 -0.70989031 -0.73992743] node number: 7 output\_node: False current delta: None

output layer:

rate of change: 0.5 bias: 0.28148273246185274 weigths:[ 0.30094632 -0.12112586 -0.62273603 0.38886236 -0.82759145 -0.82027581

-0.6475207 -0.85356538] node number: 0 output\_node: True current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[ 0.28363415 -0.28736303 0.17187688 -0.21865319 -0.72963859 -0.07667244

-0.25743912 0.78074645] node number: 1 output\_node: True current delta: None

rate of change: 0.5 bias: 0.28148273246185274 weigths:[-0.45315067 0.15006691 -0.78590543 0.50205883 -0.3751654 -0.0900909

0.01014429 0.01499436] node number: 2 output\_node: True current delta: None

cycle: 3 fault: 102.15497459234295

cycle: 7 fault: 99.75668846700829

cycle: 11 fault: 98.78347771254478

cycle: 15 fault: 98.06739161202536

cycle: 19 fault: 97.24030706713691

cycle: 23 fault: 96.23807018834493

cycle: 27 fault: 95.06379577244968

cycle: 31 fault: 93.76203947767111

cycle: 35 fault: 92.39915091370526

cycle: 39 fault: 91.01923012114986

cycle: 43 fault: 89.64016309597095

cycle: 47 fault: 88.27108111047598

cycle: 51 fault: 86.91998116178418

cycle: 55 fault: 85.59449684132376

cycle: 59 fault: 84.30143237375998

cycle: 63 fault: 83.04645690480093

cycle: 67 fault: 81.83400627588743

cycle: 71 fault: 80.66729828245617

cycle: 75 fault: 79.54841078279507

cycle: 79 fault: 78.47839936225685

cycle: 83 fault: 77.45743884987608

cycle: 87 fault: 76.48497481740787

cycle: 91 fault: 75.55987325409306

cycle: 95 fault: 74.680559685495

cycle: 99 fault: 73.8451423573583

cycle: 103 fault: 73.05151703906294

cycle: 107 fault: 72.29745319367206

cycle: 111 fault: 71.5806626869189

cycle: 115 fault: 70.8988529922403

cycle: 119 fault: 70.24976716595235

cycle: 123 fault: 69.63121287757038

cycle: 127 fault: 69.04108261298029

cycle: 131 fault: 68.47736691337992

cycle: 135 fault: 67.93816222955621

cycle: 139 fault: 67.42167469414268

cycle: 143 fault: 66.9262208625598

cycle: 147 fault: 66.45022625439736

cycle: 151 fault: 65.99222234280455

cycle: 155 fault: 65.55084248832132

cycle: 159 fault: 65.1248171921498

cycle: 163 fault: 64.7129689481116

cycle: 167 fault: 64.31420689836382

cycle: 171 fault: 63.927521441459774

cycle: 175 fault: 63.55197889899912

cycle: 179 fault: 63.186716315806166

cycle: 183 fault: 62.830936445645044

cycle: 187 fault: 62.48390295775013

cycle: 191 fault: 62.14493588718194

cycle: 195 fault: 61.81340734290543

cycle: 199 fault: 61.48873748057812

cycle: 203 fault: 61.17039074167965

cycle: 207 fault: 60.85787235638931

cycle: 211 fault: 60.55072510425882

cycle: 215 fault: 60.24852632407685

cycle: 219 fault: 59.95088516227731

cycle: 223 fault: 59.657440047736365

cycle: 227 fault: 59.367856379772775

cycle: 231 fault: 59.081824415552845

cycle: 235 fault: 58.79905734284775

cycle: 239 fault: 58.51928952413445

cycle: 243 fault: 58.24227489831277

cycle: 247 fault: 57.967785526778854

cycle: 251 fault: 57.69561027119582

cycle: 255 fault: 57.42555359099658

cycle: 259 fault: 57.15743444940789

cycle: 263 fault: 56.89108531756731

cycle: 267 fault: 56.62635126709903

cycle: 271 fault: 56.363089142299444

cycle: 275 fault: 56.101166803851555

cycle: 279 fault: 55.84046243672656

cycle: 283 fault: 55.58086391563557

cycle: 287 fault: 55.322268222062476

cycle: 291 fault: 55.0645809075335

cycle: 295 fault: 54.807715598359536

cycle: 299 fault: 54.55159353762397

cycle: 303 fault: 54.29614316067524

cycle: 307 fault: 54.04129970082505

cycle: 311 fault: 53.78700482234567

cycle: 315 fault: 53.533206278204496

cycle: 319 fault: 53.27985759027467

cycle: 323 fault: 53.02691775001332

cycle: 327 fault: 52.774350937813935

cycle: 331 fault: 52.52212625941374

cycle: 335 fault: 52.27021749787675

cycle: 339 fault: 52.018602879786535

cycle: 343 fault: 51.76726485436841

cycle: 347 fault: 51.516189884331055

cycle: 351 fault: 51.26536824727202

cycle: 355 fault: 51.01479384654014

cycle: 359 fault: 50.76446403049177

cycle: 363 fault: 50.5143794191237

cycle: 367 fault: 50.26454373711445

cycle: 371 fault: 50.014963652362425

cycle: 375 fault: 49.76564861917322

cycle: 379 fault: 49.51661072532072

cycle: 383 fault: 49.267864542288265

cycle: 387 fault: 49.0194269780832

cycle: 391 fault: 48.7713171321131

cycle: 395 fault: 48.52355615170705

cycle: 399 fault: 48.27616708996686

cycle: 403 fault: 48.029174764727685

cycle: 407 fault: 47.78260561850361

cycle: 411 fault: 47.53648757938268

cycle: 415 fault: 47.29084992291697

cycle: 419 fault: 47.04572313512753

cycle: 423 fault: 46.80113877680755

cycle: 427 fault: 46.55712934936091

cycle: 431 fault: 46.313728162455725

cycle: 435 fault: 46.07096920380572

cycle: 439 fault: 45.828887011413414

cycle: 443 fault: 45.58751654862223

cycle: 447 fault: 45.346893082327036

cycle: 451 fault: 45.10705206468848

cycle: 455 fault: 44.86802901868376

cycle: 459 fault: 44.629859427808306

cycle: 463 fault: 44.39257863021921

cycle: 467 fault: 44.15622171758363

cycle: 471 fault: 43.92082343886418

cycle: 475 fault: 43.68641810924027

cycle: 479 fault: 43.4530395243292

cycle: 483 fault: 43.22072087983598

cycle: 487 fault: 42.98949469672419

cycle: 491 fault: 42.75939275196634

cycle: 495 fault: 42.53044601489693

cycle: 499 fault: 42.30268458915969

cycle: 503 fault: 42.07613766020878

cycle: 507 fault: 41.850833448295305

cycle: 511 fault: 41.62679916684381

cycle: 515 fault: 41.4040609860986

cycle: 519 fault: 41.18264400189823

cycle: 523 fault: 40.96257220941737

cycle: 527 fault: 40.74386848169729

cycle: 531 fault: 40.52655455277327

cycle: 535 fault: 40.31065100519357

cycle: 539 fault: 40.09617726171629

cycle: 543 fault: 39.883151580961965

cycle: 547 fault: 39.671591056794576

cycle: 551 fault: 39.46151162120053

cycle: 555 fault: 39.25292805043281

cycle: 559 fault: 39.04585397418834

cycle: 563 fault: 38.84030188758733

cycle: 567 fault: 38.63628316572683

cycle: 571 fault: 38.43380808058466

cycle: 575 fault: 38.232885820055195

cycle: 579 fault: 38.03352450890418

cycle: 583 fault: 37.83573123143757

cycle: 587 fault: 37.63951205568595

cycle: 591 fault: 37.44487205891508

cycle: 595 fault: 37.25181535428143

cycle: 599 fault: 37.06034511846013

cycle: 603 fault: 36.87046362008248

cycle: 607 fault: 36.682172248829254

cycle: 611 fault: 36.49547154503498

cycle: 615 fault: 36.31036122966849

cycle: 619 fault: 36.126840234563296

cycle: 623 fault: 35.94490673278176

cycle: 627 fault: 35.764558169004225

cycle: 631 fault: 35.58579128984499

cycle: 635 fault: 35.40860217400354

cycle: 639 fault: 35.23298626216899

cycle: 643 fault: 35.058938386602804

cycle: 647 fault: 34.88645280033261

cycle: 651 fault: 34.71552320589685

cycle: 655 fault: 34.54614278358708

cycle: 659 fault: 34.378304219140865

cycle: 663 fault: 34.21199973084474

cycle: 667 fault: 34.04722109601131

cycle: 671 fault: 33.88395967680153

cycle: 675 fault: 33.722206445366396

cycle: 679 fault: 33.56195200828844

cycle: 683 fault: 33.40318663030644

cycle: 687 fault: 33.245900257311504

cycle: 691 fault: 33.09008253860593

cycle: 695 fault: 32.93572284841985

cycle: 699 fault: 32.7828103066833

cycle: 703 fault: 32.63133379905422

cycle: 707 fault: 32.4812819962058

cycle: 711 fault: 32.3326433723783

cycle: 715 fault: 32.18540622320229

cycle: 719 fault: 32.03955868280312

cycle: 723 fault: 31.89508874019665

cycle: 727 fault: 31.751984254988294

cycle: 731 fault: 31.61023297238912

cycle: 735 fault: 31.469822537562514

cycle: 739 fault: 31.330740509317067

cycle: 743 fault: 31.192974373161267

cycle: 747 fault: 31.05651155373651

cycle: 751 fault: 30.921339426645343

cycle: 755 fault: 30.787445329692208

cycle: 759 fault: 30.65481657355429

cycle: 763 fault: 30.523440451900154

cycle: 767 fault: 30.393304250974058

cycle: 771 fault: 30.26439525866366

cycle: 775 fault: 30.136700773069162

cycle: 779 fault: 30.01020811059138

cycle: 783 fault: 29.884904613556383

cycle: 787 fault: 29.760777657394062

cycle: 791 fault: 29.6378146573877

cycle: 795 fault: 29.516003075011316

cycle: 799 fault: 29.395330423871386

cycle: 803 fault: 29.27578427526916

cycle: 807 fault: 29.157352263399194

cycle: 811 fault: 29.040022090199727

cycle: 815 fault: 28.923781529869903

cycle: 819 fault: 28.808618433068474

cycle: 823 fault: 28.694520730808186

cycle: 827 fault: 28.58147643805985

cycle: 831 fault: 28.46947365707908

cycle: 835 fault: 28.35850058046929

cycle: 839 fault: 28.24854549399295

cycle: 843 fault: 28.139596779143357

cycle: 847 fault: 28.031642915488945

cycle: 851 fault: 27.92467248280097

cycle: 855 fault: 27.81867416297569

cycle: 859 fault: 27.71363674176152

cycle: 863 fault: 27.609549110301053

cycle: 867 fault: 27.506400266497984

cycle: 871 fault: 27.404179316217608

cycle: 875 fault: 27.30287547433063

cycle: 879 fault: 27.202478065608076

cycle: 883 fault: 27.10297652547597

cycle: 887 fault: 27.004360400637538

cycle: 891 fault: 26.90661934957027

cycle: 895 fault: 26.80974314290532

cycle: 899 fault: 26.713721663695885

cycle: 903 fault: 26.618544907581253

cycle: 907 fault: 26.52420298285265

cycle: 911 fault: 26.430686110427168

cycle: 915 fault: 26.337984623735117

cycle: 919 fault: 26.246088968526497

cycle: 923 fault: 26.154989702601622

cycle: 927 fault: 26.064677495471013

cycle: 931 fault: 25.97514312794915

cycle: 935 fault: 25.8863774916864

cycle: 939 fault: 25.798371588643825

cycle: 943 fault: 25.71111653051434

cycle: 947 fault: 25.62460353809451

cycle: 951 fault: 25.538823940610573

cycle: 955 fault: 25.453769175001707

cycle: 959 fault: 25.369430785164646

cycle: 963 fault: 25.2858004211619

cycle: 967 fault: 25.202869838397092

cycle: 971 fault: 25.120630896759987

cycle: 975 fault: 25.039075559743956

cycle: 979 fault: 24.958195893538292

cycle: 983 fault: 24.877984066097714

cycle: 987 fault: 24.79843234619153

cycle: 991 fault: 24.719533102434237

cycle: 995 fault: 24.641278802299833

cycle: 999 fault: 24.5636620111216

END NETWORK:

hidden layer 0:

rate of change: 0.5 bias: 0.28778923081135294 weigths:[ 0.79730261 0.49997752 0.25878779 -0.36120546] node number: 0 output\_node: False current delta: 5.625679773250682e-06

rate of change: 0.5 bias: -0.5598517587793117 weigths:[-1.57595787 -1.5033376 2.24807483 2.4085416 ] node number: 1 output\_node: False current delta: -0.016347986229705035

rate of change: 0.5 bias: 1.1793722257278163 weigths:[ 1.63084639 1.36344588 -2.66842114 -1.50475992] node number: 2 output\_node: False current delta: 0.015454669577707258

rate of change: 0.5 bias: 0.5175762670801815 weigths:[ 0.64820341 1.16839013 -2.8582655 -0.10232771] node number: 3 output\_node: False current delta: -7.963995924702583e-05

rate of change: 0.5 bias: 0.088295820685605 weigths:[-0.05087052 -1.58920892 1.67201375 0.94812619] node number: 4 output\_node: False current delta: 0.00014881710895138148

rate of change: 0.5 bias: 0.25876725638903597 weigths:[-0.09891797 -0.94375928 -0.90129687 -0.70880489] node number: 5 output\_node: False current delta: -2.0481560643407813e-07

rate of change: 0.5 bias: -0.04722991690386554 weigths:[-0.6598584 0.85227683 0.00386565 1.48059776] node number: 6 output\_node: False current delta: -0.007245821353537531

rate of change: 0.5 bias: 0.1272594577512304 weigths:[-0.93205208 0.23549156 -0.91145325 -0.76979037] node number: 7 output\_node: False current delta: 3.8118276422571225e-07

output layer:

rate of change: 0.5 bias: 0.18429257341717808 weigths:[ 0.19924948 -1.45915521 0.57949239 2.46835941 -3.03425901 -0.78385054

-0.74472366 -0.69866557] node number: 0 output\_node: True current delta: 0.00018286749013442683

rate of change: 0.5 bias: -0.12642792293339936 weigths:[-0.12512946 -2.60098296 1.9692812 -3.45481683 1.53653841 -0.11845636

-1.40263614 0.63618303] node number: 1 output\_node: True current delta: 0.025443646283092168

rate of change: 0.5 bias: -0.06535721423960218 weigths:[-0.79219032 2.93819738 -3.70593998 -0.54859678 0.74494862 -0.11030574

0.55200969 -0.06343986] node number: 2 output\_node: True current delta: -0.013138657261423867

took 75000 updates and 1000.0 batches

input: [5.1 3.5 1.4 0.2] result: [0.94810727 0.09433548 0.00805646] desired: [1. 0. 0.]

input: [4.7 3.2 1.3 0.2] result: [0.94462898 0.09836647 0.00818963] desired: [1. 0. 0.]

input: [5. 3.6 1.4 0.2] result: [0.94764481 0.08899279 0.0081882 ] desired: [1. 0. 0.]

input: [4.6 3.4 1.4 0.3] result: [0.94084178 0.08776844 0.00863599] desired: [1. 0. 0.]

input: [4.4 2.9 1.4 0.2] result: [0.93245103 0.11802457 0.00856998] desired: [1. 0. 0.]

input: [5.4 3.7 1.5 0.2] result: [0.94963942 0.0935582 0.00797964] desired: [1. 0. 0.]

input: [4.8 3. 1.4 0.1] result: [0.94261785 0.11931925 0.0079785 ] desired: [1. 0. 0.]

input: [5.8 4. 1.2 0.2] result: [0.95412766 0.0874113 0.00778835] desired: [1. 0. 0.]

input: [5.4 3.9 1.3 0.4] result: [0.94837887 0.07698859 0.0083836 ] desired: [1. 0. 0.]

input: [5.7 3.8 1.7 0.3] result: [0.94742175 0.09518665 0.00809765] desired: [1. 0. 0.]

input: [5.4 3.4 1.7 0.2] result: [0.94288511 0.11531267 0.00804714] desired: [1. 0. 0.]

input: [4.6 3.6 1. 0.2] result: [0.94860939 0.07755993 0.0083357 ] desired: [1. 0. 0.]

input: [4.8 3.4 1.9 0.2] result: [0.92354727 0.12811416 0.00898088] desired: [1. 0. 0.]

input: [5. 3.4 1.6 0.4] result: [0.936529 0.09729293 0.00870575] desired: [1. 0. 0.]

input: [5.2 3.4 1.4 0.2] result: [0.9484207 0.10005075 0.00793334] desired: [1. 0. 0.]

input: [4.8 3.1 1.6 0.2] result: [0.93326094 0.12292106 0.0084737 ] desired: [1. 0. 0.]

input: [5.2 4.1 1.5 0.1] result: [0.94978342 0.08116277 0.0082154 ] desired: [1. 0. 0.]

input: [4.9 3.1 1.5 0.1] result: [0.94193526 0.12023967 0.00801905] desired: [1. 0. 0.]

input: [5.5 3.5 1.3 0.2] result: [0.95232471 0.09883125 0.00769989] desired: [1. 0. 0.]

input: [4.4 3. 1.3 0.2] result: [0.93897947 0.10473394 0.00841352] desired: [1. 0. 0.]

input: [5. 3.5 1.3 0.3] result: [0.94692833 0.08682916 0.00826481] desired: [1. 0. 0.]

input: [4.4 3.2 1.3 0.2] result: [0.9416531 0.09427248 0.0084514 ] desired: [1. 0. 0.]

input: [5.1 3.8 1.9 0.4] result: [0.93301063 0.09248996 0.00904743] desired: [1. 0. 0.]

input: [5.1 3.8 1.6 0.2] result: [0.94600457 0.08764686 0.00833576] desired: [1. 0. 0.]

input: [5.3 3.7 1.5 0.2] result: [0.94887407 0.09199126 0.00805834] desired: [1. 0. 0.]

input: [7. 3.2 4.7 1.4] result: [0.07216074 0.88663248 0.04848646] desired: [0. 1. 0.]

input: [6.9 3.1 4.9 1.5] result: [0.05490776 0.82089012 0.10099221] desired: [0. 1. 0.]

input: [6.5 2.8 4.6 1.5] result: [0.04865002 0.7760261 0.1408862 ] desired: [0. 1. 0.]

input: [6.3 3.3 4.7 1.6] result: [0.04394309 0.72453733 0.15894015] desired: [0. 1. 0.]

input: [6.6 2.9 4.6 1.3] result: [0.06472678 0.86236938 0.07124841] desired: [0. 1. 0.]

input: [5. 2. 3.5 1. ] result: [0.0595059 0.8069054 0.11404607] desired: [0. 1. 0.]

input: [6. 2.2 4. 1. ] result: [0.07479054 0.88974588 0.06067735] desired: [0. 1. 0.]

input: [5.6 2.9 3.6 1.3] result: [0.08808271 0.84621694 0.04352906] desired: [0. 1. 0.]

input: [5.6 3. 4.5 1.5] result: [0.02943541 0.51513415 0.41301646] desired: [0. 1. 0.]

input: [6.2 2.2 4.5 1.5] result: [0.03031153 0.55288236 0.4538289 ] desired: [0. 1. 0.]

input: [5.9 3.2 4.8 1.8] result: [0.02046955 0.33991163 0.64479562] desired: [0. 1. 0.]

input: [6.3 2.5 4.9 1.5] result: [0.02455842 0.43190353 0.6232949 ] desired: [0. 1. 0.]

input: [6.4 2.9 4.3 1.3] result: [0.0715851 0.87579203 0.0537279 ] desired: [0. 1. 0.]

input: [6.8 2.8 4.8 1.4] result: [0.05520404 0.8224999 0.11260321] desired: [0. 1. 0.]

input: [6. 2.9 4.5 1.5] result: [0.03886027 0.6692093 0.23416662] desired: [0. 1. 0.]

input: [5.5 2.4 3.8 1.1] result: [0.06665597 0.84509889 0.07670587] desired: [0. 1. 0.]

input: [5.8 2.7 3.9 1.2] result: [0.07368982 0.8634921 0.05563306] desired: [0. 1. 0.]

input: [5.4 3. 4.5 1.5] result: [0.02465537 0.41671742 0.54862383] desired: [0. 1. 0.]

input: [6.7 3.1 4.7 1.5] result: [0.05715271 0.82895454 0.0870164 ] desired: [0. 1. 0.]

input: [5.6 3. 4.1 1.3] result: [0.05866678 0.79743199 0.09169261] desired: [0. 1. 0.]

input: [5.5 2.6 4.4 1.2] result: [0.03487745 0.60260434 0.35864949] desired: [0. 1. 0.]

input: [5.8 2.6 4. 1.2] result: [0.06575467 0.84755954 0.07317679] desired: [0. 1. 0.]

input: [5.6 2.7 4.2 1.3] result: [0.04504922 0.7219534 0.18197087] desired: [0. 1. 0.]

input: [5.7 2.9 4.2 1.3] result: [0.05384992 0.78343774 0.11308883] desired: [0. 1. 0.]

input: [5.1 2.5 3. 1.1] result: [0.1293563 0.831577 0.03315628] desired: [0. 1. 0.]

input: [6.3 3.3 6. 2.5] result: [0.00859126 0.07515188 0.96079682] desired: [0. 0. 1.]

input: [7.1 3. 5.9 2.1] result: [0.01196493 0.14006937 0.92211372] desired: [0. 0. 1.]

input: [6.5 3. 5.8 2.2] result: [0.00977995 0.09590652 0.95026234] desired: [0. 0. 1.]

input: [4.9 2.5 4.5 1.7] result: [0.01139988 0.12462237 0.92520293] desired: [0. 0. 1.]

input: [6.7 2.5 5.8 1.8] result: [0.01217917 0.14002897 0.93618149] desired: [0. 0. 1.]

input: [6.5 3.2 5.1 2. ] result: [0.01862471 0.30703777 0.69938996] desired: [0. 0. 1.]

input: [6.8 3. 5.5 2.1] result: [0.01309026 0.16838691 0.88851624] desired: [0. 0. 1.]

input: [5.8 2.8 5.1 2.4] result: [0.00919461 0.08603721 0.95234248] desired: [0. 0. 1.]

input: [6.5 3. 5.5 1.8] result: [0.01427698 0.19065259 0.87666087] desired: [0. 0. 1.]

input: [7.7 2.6 6.9 2.3] result: [0.01041603 0.10471379 0.95691893] desired: [0. 0. 1.]

input: [6.9 3.2 5.7 2.3] result: [0.0111663 0.12621907 0.92198481] desired: [0. 0. 1.]

input: [7.7 2.8 6.7 2. ] result: [0.01170312 0.12906887 0.94608283] desired: [0. 0. 1.]

input: [6.7 3.3 5.7 2.1] result: [0.01195413 0.14144777 0.90983733] desired: [0. 0. 1.]

input: [6.2 2.8 4.8 1.8] result: [0.02050009 0.34898219 0.66511584] desired: [0. 0. 1.]

input: [6.4 2.8 5.6 2.1] result: [0.01033143 0.10618279 0.94499185] desired: [0. 0. 1.]

input: [7.4 2.8 6.1 1.9] result: [0.01375748 0.1751688 0.91133835] desired: [0. 0. 1.]

input: [6.4 2.8 5.6 2.2] result: [0.00992194 0.09866023 0.94900713] desired: [0. 0. 1.]

input: [6.1 2.6 5.6 1.4] result: [0.0136767 0.16911971 0.91904449] desired: [0. 0. 1.]

input: [6.3 3.4 5.6 2.4] result: [0.0095196 0.09238988 0.94586312] desired: [0. 0. 1.]

input: [6. 3. 4.8 1.8] result: [0.01957139 0.3226266 0.68416471] desired: [0. 0. 1.]

input: [6.7 3.1 5.6 2.4] result: [0.01014956 0.10521509 0.93862169] desired: [0. 0. 1.]

input: [5.8 2.7 5.1 1.9] result: [0.01116072 0.12254577 0.93050596] desired: [0. 0. 1.]

input: [6.7 3.3 5.7 2.5] result: [0.00967795 0.09615746 0.94380187] desired: [0. 0. 1.]

input: [6.3 2.5 5. 1.9] result: [0.0142652 0.19442972 0.87257544] desired: [0. 0. 1.]

input: [6.2 3.4 5.4 2.3] result: [0.01042722 0.11028514 0.92901216] desired: [0. 0. 1.]

correctly guessed from validation set: 96.0 %