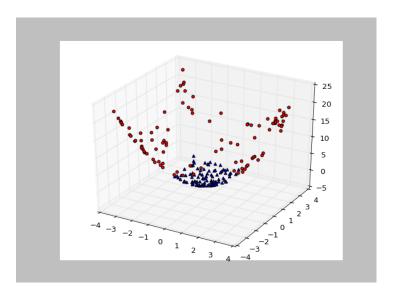
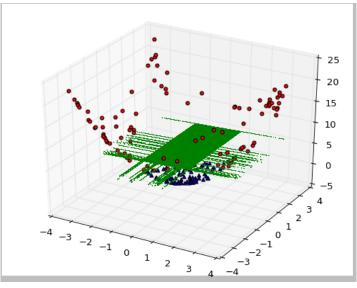
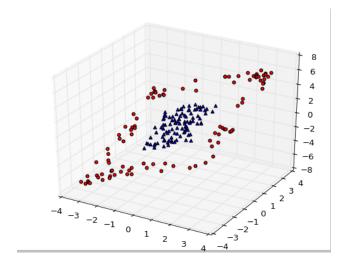
Q1: Kernel\_Trick

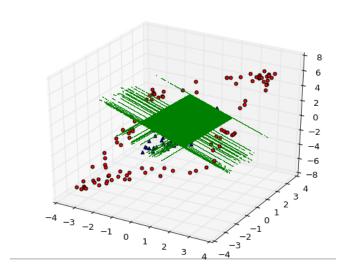
Kernel used:  $z = ((x^2) + (y^2))$ Accuracy = 1.00





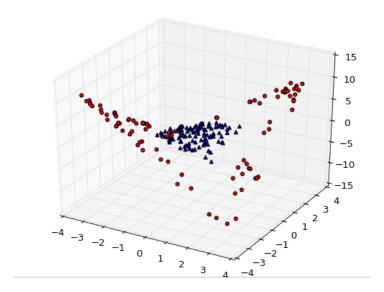
Kernel used: z = x + yAccuracy = 0.525

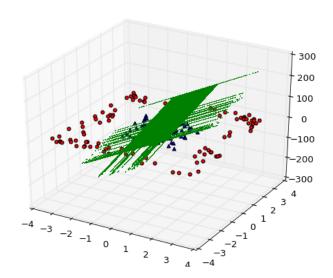




Kernel used: z = x \* y

## Accuracy = 0.52





Kernel used:  $z = e^{(x^2 + y^2)}$ Accuracy = 0.84

```
linear | 0.1 | 0.1 | 85.043 | 84.250 | 84.567 | 84.092 | 84.146
linear | 0.1 | 1.0 | 86.957 | 86.250 | 86.483 | 86.149 | 86.189
linear | 0.1 | 10.0 | 87.736 | 86.150 | 86.098 | 85.983 | 85.984
linear | 0.1 | 100.0 | 88.250 | 84.700 | 85.004 | 84.548 | 84.646
linear | 1.0 | 0.1 | 85.321 | 84.350 | 84.824 | 84.168 | 84.192
linear | 1.0 | 1.0 | 87.071 | 84.950 | 84.993 | 84.827 | 84.847
linear | 1.0 | 10.0 | 87.679 | 86.550 | 86.521 | 86.401 | 86.371
linear | 1.0 | 100.0 | 88.450 | 84.900 | 85.199 | 84.804 | 84.842
linear | 10.0 | 0.1 | 85.314 | 83.700 | 84.295 | 83.544 | 83.691
linear | 10.0 | 1.0 | 87.057 | 85.450 | 85.769 | 85.303 | 85.400
linear | 10.0 | 10.0 | 87.843 | 85.000 | 85.145 | 84.811 | 84.840
linear | 10.0 | 100.0 | 87.864 | 87.300 | 87.557 | 87.153 | 87.203
linear | 100.0 | 0.1 | 84.836 | 85.250 | 85.632 | 85.085 | 85.159
linear | 100.0 | 1.0 | 87.029 | 85.150 | 85.282 | 84.965 | 84.965
linear | 100.0 | 10.0 | 87.743 | 85.150 | 85.381 | 84.997 | 85.044
linear | 100.0 | 100.0 | 88.314 | 85.700 | 85.920 | 85.573 | 85.636
poly | 0.1 | 0.1 | 84.171 | 83.500 | 89.493 | 83.310 | 85.118
poly | 0.1 | 1.0 | 96.007 | 91.850 | 92.768 | 91.789 | 92.035
poly | 0.1 | 10.0 | 99.436 | 94.850 | 95.020 | 94.794 | 94.840
poly | 0.1 | 100.0 | 99.964 | 94.850 | 94.906 | 94.801 | 94.812
poly | 1.0 | 0.1 | 99.943 | 94.550 | 94.655 | 94.504 | 94.527
poly | 1.0 | 1.0 | 100.000 | 94.150 | 94.250 | 94.123 | 94.141
poly | 1.0 | 10.0 | 100.000 | 94.700 | 94.760 | 94.666 | 94.683
poly | 1.0 | 100.0 | 100.000 | 94.750 | 94.776 | 94.731 | 94.726
poly | 10.0 | 0.1 | 100.000 | 93.700 | 93.775 | 93.655 | 93.663
poly | 10.0 | 1.0 | 100.000 | 93.400 | 93.481 | 93.379 | 93.394
poly | 10.0 | 10.0 | 100.000 | 94.300 | 94.327 | 94.273 | 94.278
poly | 10.0 | 100.0 | 100.000 | 94.350 | 94.518 | 94.324 | 94.374
poly | 100.0 | 0.1 | 100.000 | 93.800 | 93.976 | 93.780 | 93.792
poly | 100.0 | 1.0 | 100.000 | 94.350 | 94.426 | 94.324 | 94.332
poly | 100.0 | 10.0 | 100.000 | 93.700 | 93.741 | 93.655 | 93.660
poly | 100.0 | 100.0 | 100.000 | 95.000 | 95.086 | 94.974 | 94.982
rbf | 0.1 | 0.1 | 87.179 | 86.100 | 87.172 | 85.918 | 86.142
rbf | 0.1 | 1.0 | 97.243 | 95.050 | 95.193 | 95.004 | 95.050
rbf | 0.1 | 10.0 | 99.743 | 97.900 | 97.945 | 97.883 | 97.893
rbf | 0.1 | 100.0 | 100.000 | 97.250 | 97.262 | 97.240 | 97.234
rbf | 1.0 | 0.1 | 79.136 | 69.450 | 93.402 | 69.047 | 76.322
rbf | 1.0 | 1.0 | 99.943 | 94.300 | 95.491 | 94.259 | 94.600
rbf | 1.0 | 10.0 | 100.000 | 93.900 | 95.120 | 93.850 | 94.212
rbf | 1.0 | 100.0 | 100.000 | 92.150 | 93.871 | 92.100 | 92.631
```

Best result: kernel = rbf, gamma = 0.1 c = 100