**1)**

**Attribute Evaluator: CFsSubsetEval**

**Search Method : BestFit**

**Using full training set**

**Output:**

**Selected attributes: 10,14 : 2**

**9.0**

**13.0**

**2)**

**Attribute Evaluator: CorrelationAttributeEval**

**Search Method : Ranker**

**Using full training set**

**=== Attribute Selection on all input data ===**

**Search Method:**

**Attribute ranking.**

**Attribute Evaluator (supervised, Class (numeric): 83 82.0):**

**Correlation Ranking Filter**

**Ranked attributes:**

**0.080757 14 13.0**

**0.077383 3 2.0**

**0.060882 10 9.0**

**0.047343 56 55.0**

**0.04684 67 66.0**

**0.044381 68 67.0**

**0.044373 11 10.0**

**0.044151 57 56.0**

**0.043739 9 8.0**

**0.042891 7 6.0**

**0.042684 8 7.0**

**0.042586 55 54.0**

**0.040328 21 20.0**

**0.039511 13 12.0**

**0.03822 75 74.0**

**0.03676 2 1.0**

**0.032942 66 65.0**

**0.031888 65 64.0**

**0.031488 64 63.0**

**0.030699 73 72.0**

**0.027888 80 79.0**

**0.026102 46 45.0**

**0.024483 49 48.0**

**0.024236 47 46.0**

**0.023628 36 35.0**

**0.023545 69 68.0**

**0.022011 82 81.0**

**0.021619 79 78.0**

**0.021557 45 44.0**

**0.021039 40 39.0**

**0.019797 6 5.0**

**0.019391 4 3.0**

**0.019163 81 80.0**

**0.017771 12 11.0**

**0.016976 1 0.0**

**0.015837 35 34.0**

**0.014493 70 69.0**

**0.01354 72 71.0**

**0.013492 48 47.0**

**0.013253 37 36.0**

**0.012454 77 76.0**

**0.012345 71 70.0**

**0.011261 39 38.0**

**0.010532 5 4.0**

**0.008069 74 73.0**

**0.004143 78 77.0**

**0 16 15.0**

**0 18 17.0**

**0 19 18.0**

**0 20 19.0**

**0 58 57.0**

**0 17 16.0**

**0 60 59.0**

**0 15 14.0**

**0 59 58.0**

**0 62 61.0**

**0 23 22.0**

**0 61 60.0**

**0 22 21.0**

**0 24 23.0**

**0 50 49.0**

**0 52 51.0**

**0 25 24.0**

**0 53 52.0**

**0 43 42.0**

**0 33 32.0**

**0 44 43.0**

**0 51 50.0**

**0 34 33.0**

**0 54 53.0**

**0 32 31.0**

**0 29 28.0**

**0 31 30.0**

**0 30 29.0**

**0 28 27.0**

**0 27 26.0**

**0 26 25.0**

**-0.000404 76 75.0**

**-0.003486 41 40.0**

**-0.0046 38 37.0**

**-0.007735 42 41.0**

**-0.010253 63 62.0**

**Selected attributes: 14,3,10,56,67,68,11,57,9,7,8,55,21,13,75,2,66,65,64,73,80,46,49,47,36,69,82,79,45,40,6,4,81,12,1,35,70,72,48,37,77,71,39,5,74,78,16,18,19,20,58,17,60,15,59,62,23,61,22,24,50,52,25,53,43,33,44,51,34,54,32,29,31,30,28,27,26,76,41,38,42,63 : 82**

**3)**

**Attribute Evaluator: PrincipalComponent**

**Search Method : Ranker**

**Using full training set**

**=== Attribute Selection on all input data ===**

**Search Method:**

**Attribute ranking.**

**Attribute Evaluator (unsupervised):**

**Principal Components Attribute Transformer**

**Correlation matrix**

**1 0.86 0.73 0.54 0.33 0.39 0.83 0.82 0.82 0.72 0.91 1 0.85 0.73 0.43 0.4 0.59 0.34 0 0.29 0.4 0.11 -0.02 0.5 0.52 0.22 0.34 0.55 0.71 0.7 0.71 -0.19 0.53 0.53 0.53 0.52 0.49 0.44 0.36 0.35 0.35 0.47 0.28 0.52 0.14 0.35 0.34 0.55 0.49 0.54 0.54**

**0.86 1 0.66 0.48 0.39 0.39 0.94 0.93 0.92 0.85 0.99 0.85 0.98 0.65 0.47 0.44 0.53 0.39 0.01 0.33 0.39 0.14 0 0.59 0.6 0.26 0.4 0.64 0.8 0.8 0.79 -0.21 0.61 0.62 0.62 0.6 0.54 0.49 0.42 0.41 0.41 0.52 0.33 0.59 0.2 0.42 0.4 0.6 0.53 0.59 0.58**

**0.73 0.66 1 0.48 0.33 0.56 0.61 0.59 0.6 0.49 0.75 0.72 0.63 1 0.32 0.42 0.52 0.31 0.03 0.26 0.56 0.17 0.09 0.44 0.45 0.21 0.31 0.48 0.59 0.57 0.59 -0.1 0.46 0.46 0.46 0.41 0.39 0.38 0.35 0.34 0.35 0.4 0.29 0.44 0.2 0.25 0.19 0.45 0.36 0.46 0.46**

**0.54 0.48 0.48 1 0.69 0.81 0.46 0.45 0.46 0.38 0.52 0.54 0.48 0.49 0.77 0.81 0.92 0.6 0.14 0.47 0.77 0.57 0.37 0.83 0.83 0.67 0.47 0.8 0.6 0.57 0.59 -0.12 0.78 0.78 0.78 0.78 0.8 0.68 0.54 0.53 0.54 0.74 0.43 0.8 0.25 0.4 0.43 0.8 0.77 0.78 0.81**

**0.33 0.39 0.33 0.69 1 0.65 0.37 0.36 0.37 0.3 0.4 0.33 0.39 0.33 0.61 0.98 0.67 0.97 0.75 0.93 0.63 0.38 0.31 0.72 0.72 0.57 0.44 0.7 0.51 0.49 0.51 -0.14 0.68 0.68 0.68 0.66 0.65 0.59 0.49 0.48 0.49 0.63 0.4 0.68 0.27 0.34 0.38 0.67 0.62 0.65 0.66**

**0.39 0.39 0.56 0.81 0.65 1 0.36 0.35 0.37 0.26 0.44 0.39 0.37 0.56 0.61 0.79 0.81 0.57 0.17 0.43 0.99 0.4 0.43 0.78 0.77 0.71 0.46 0.72 0.5 0.47 0.49 -0.05 0.7 0.7 0.7 0.65 0.66 0.6 0.5 0.49 0.5 0.64 0.41 0.69 0.27 0.31 0.31 0.69 0.61 0.68 0.7**

**0.83 0.94 0.61 0.46 0.37 0.36 1 0.99 0.99 0.83 0.93 0.84 0.95 0.62 0.47 0.41 0.51 0.38 0.01 0.32 0.37 0.1 -0.01 0.59 0.6 0.26 0.43 0.64 0.85 0.86 0.85 -0.21 0.65 0.65 0.65 0.59 0.53 0.48 0.4 0.39 0.39 0.51 0.32 0.57 0.18 0.33 0.35 0.61 0.54 0.58 0.57**

**0.82 0.93 0.59 0.45 0.36 0.35 0.99 1 0.99 0.84 0.92 0.82 0.94 0.6 0.46 0.41 0.5 0.37 0.01 0.32 0.36 0.1 -0.01 0.58 0.6 0.26 0.42 0.64 0.84 0.87 0.85 -0.21 0.64 0.65 0.65 0.59 0.53 0.48 0.4 0.39 0.4 0.51 0.32 0.57 0.18 0.34 0.36 0.61 0.53 0.58 0.57**

**0.82 0.92 0.6 0.46 0.37 0.37 0.99 0.99 1 0.82 0.92 0.82 0.94 0.61 0.46 0.42 0.51 0.38 0.01 0.33 0.37 0.1 0 0.59 0.61 0.27 0.42 0.65 0.86 0.87 0.87 -0.2 0.65 0.66 0.66 0.59 0.53 0.48 0.4 0.39 0.4 0.51 0.32 0.57 0.18 0.33 0.36 0.62 0.54 0.59 0.57**

**0.72 0.85 0.49 0.38 0.3 0.26 0.83 0.84 0.82 1 0.83 0.73 0.86 0.5 0.41 0.33 0.42 0.31 -0.02 0.26 0.27 0.07 -0.03 0.49 0.5 0.2 0.35 0.54 0.7 0.71 0.7 -0.22 0.51 0.52 0.52 0.58 0.46 0.39 0.32 0.31 0.32 0.42 0.25 0.5 0.14 0.36 0.39 0.5 0.45 0.48 0.48**

**0.91 0.99 0.75 0.52 0.4 0.44 0.93 0.92 0.92 0.83 1 0.9 0.97 0.75 0.47 0.46 0.57 0.4 0.01 0.34 0.44 0.15 0.01 0.59 0.6 0.26 0.4 0.65 0.81 0.8 0.8 -0.21 0.62 0.62 0.62 0.6 0.55 0.5 0.43 0.42 0.42 0.53 0.34 0.59 0.21 0.41 0.39 0.61 0.53 0.6 0.59**

**1 0.85 0.72 0.54 0.33 0.39 0.84 0.82 0.82 0.73 0.9 1 0.86 0.73 0.44 0.4 0.6 0.34 0 0.29 0.4 0.09 -0.02 0.51 0.52 0.22 0.34 0.56 0.72 0.71 0.71 -0.2 0.54 0.54 0.54 0.52 0.49 0.44 0.36 0.35 0.35 0.47 0.28 0.52 0.15 0.31 0.34 0.56 0.5 0.54 0.55**

**0.85 0.98 0.63 0.48 0.39 0.37 0.95 0.94 0.94 0.86 0.97 0.86 1 0.64 0.48 0.43 0.53 0.4 0.01 0.34 0.38 0.1 -0.02 0.6 0.61 0.26 0.4 0.65 0.8 0.81 0.8 -0.22 0.62 0.63 0.63 0.61 0.55 0.5 0.42 0.41 0.42 0.53 0.34 0.59 0.2 0.38 0.4 0.62 0.55 0.6 0.59**

**0.73 0.65 1 0.49 0.33 0.56 0.62 0.6 0.61 0.5 0.75 0.73 0.64 1 0.33 0.43 0.53 0.32 0.03 0.27 0.56 0.16 0.08 0.44 0.46 0.21 0.31 0.48 0.59 0.57 0.59 -0.1 0.47 0.47 0.47 0.42 0.4 0.39 0.36 0.35 0.35 0.41 0.3 0.45 0.21 0.24 0.19 0.46 0.37 0.47 0.47**

**0.43 0.47 0.32 0.77 0.61 0.61 0.47 0.46 0.46 0.41 0.47 0.44 0.48 0.33 1 0.69 0.84 0.62 0.13 0.5 0.62 0.16 0.07 0.86 0.87 0.62 0.46 0.87 0.62 0.59 0.61 -0.18 0.87 0.87 0.86 0.91 0.97 0.78 0.59 0.57 0.58 0.86 0.45 0.92 0.25 0.39 0.49 0.87 0.93 0.8 0.88**

**0.4 0.44 0.42 0.81 0.98 0.79 0.41 0.41 0.42 0.33 0.46 0.4 0.43 0.43 0.69 1 0.78 0.93 0.63 0.86 0.77 0.43 0.35 0.81 0.81 0.64 0.49 0.79 0.57 0.54 0.56 -0.13 0.76 0.77 0.76 0.73 0.74 0.66 0.55 0.54 0.54 0.7 0.45 0.76 0.29 0.37 0.41 0.75 0.7 0.73 0.75**

**0.59 0.53 0.52 0.92 0.67 0.81 0.51 0.5 0.51 0.42 0.57 0.6 0.53 0.53 0.84 0.78 1 0.65 0.15 0.51 0.82 0.21 0.29 0.9 0.9 0.73 0.49 0.87 0.66 0.63 0.65 -0.14 0.85 0.85 0.85 0.86 0.88 0.74 0.58 0.57 0.58 0.81 0.46 0.87 0.27 0.42 0.47 0.87 0.85 0.84 0.88**

**0.34 0.39 0.31 0.6 0.97 0.57 0.38 0.37 0.38 0.31 0.4 0.34 0.4 0.32 0.62 0.93 0.65 1 0.8 0.98 0.58 0.18 0.15 0.7 0.71 0.52 0.42 0.7 0.51 0.49 0.51 -0.15 0.68 0.68 0.68 0.66 0.66 0.59 0.48 0.48 0.48 0.63 0.39 0.68 0.26 0.33 0.39 0.67 0.64 0.65 0.66**

**0 0.01 0.03 0.14 0.75 0.17 0.01 0.01 0.01 -0.02 0.01 0 0.01 0.03 0.13 0.63 0.15 0.8 1 0.87 0.17 0.05 0.09 0.17 0.16 0.2 0.09 0.14 0.06 0.06 0.06 -0.08 0.13 0.13 0.13 0.12 0.13 0.12 0.1 0.1 0.1 0.13 0.09 0.13 0.06 0.06 0.07 0.13 0.13 0.13 0.13**

**0.29 0.33 0.26 0.47 0.93 0.43 0.32 0.32 0.33 0.26 0.34 0.29 0.34 0.27 0.5 0.86 0.51 0.98 0.87 1 0.43 0.14 0.07 0.56 0.57 0.34 0.35 0.58 0.43 0.41 0.43 -0.13 0.56 0.56 0.56 0.55 0.54 0.49 0.4 0.4 0.4 0.52 0.33 0.56 0.22 0.28 0.32 0.55 0.52 0.54 0.54**

**0.4 0.39 0.56 0.77 0.63 0.99 0.37 0.36 0.37 0.27 0.44 0.4 0.38 0.56 0.62 0.77 0.82 0.58 0.17 0.43 1 0.28 0.4 0.79 0.78 0.72 0.46 0.73 0.51 0.48 0.5 -0.05 0.71 0.71 0.71 0.66 0.67 0.61 0.5 0.49 0.5 0.65 0.41 0.7 0.27 0.31 0.31 0.7 0.63 0.69 0.71**

**0.11 0.14 0.17 0.57 0.38 0.4 0.1 0.1 0.1 0.07 0.15 0.09 0.1 0.16 0.16 0.43 0.21 0.18 0.05 0.14 0.28 1 0.36 0.23 0.23 0.18 0.18 0.22 0.15 0.14 0.15 -0.01 0.21 0.21 0.21 0.19 0.18 0.18 0.17 0.17 0.17 0.19 0.15 0.21 0.13 0.15 0.11 0.19 0.14 0.21 0.2**

**-0.02 0 0.09 0.37 0.31 0.43 -0.01 -0.01 0 -0.03 0.01 -0.02 -0.02 0.08 0.07 0.35 0.29 0.15 0.09 0.07 0.4 0.36 1 0.25 0.22 0.47 0.15 0.13 0.08 0.06 0.08 0.05 0.12 0.12 0.12 0.1 0.08 0.1 0.1 0.1 0.1 0.1 0.09 0.11 0.07 0.05 0.02 0.1 0.06 0.15 0.12**

**0.5 0.59 0.44 0.83 0.72 0.78 0.59 0.58 0.59 0.49 0.59 0.51 0.6 0.44 0.86 0.81 0.9 0.7 0.17 0.56 0.79 0.23 0.25 1 1 0.78 0.62 0.97 0.75 0.73 0.74 -0.16 0.96 0.96 0.95 0.92 0.91 0.8 0.65 0.64 0.65 0.86 0.52 0.93 0.33 0.46 0.53 0.92 0.89 0.9 0.91**

**0.52 0.6 0.45 0.83 0.72 0.77 0.6 0.6 0.61 0.5 0.6 0.52 0.61 0.46 0.87 0.81 0.9 0.71 0.16 0.57 0.78 0.23 0.22 1 1 0.75 0.62 0.98 0.76 0.74 0.76 -0.16 0.97 0.97 0.97 0.93 0.93 0.81 0.66 0.65 0.65 0.87 0.53 0.95 0.33 0.46 0.53 0.94 0.9 0.91 0.92**

**0.22 0.26 0.21 0.67 0.57 0.71 0.26 0.26 0.27 0.2 0.26 0.22 0.26 0.21 0.62 0.64 0.73 0.52 0.2 0.34 0.72 0.18 0.47 0.78 0.75 1 0.37 0.62 0.41 0.39 0.41 -0.15 0.61 0.61 0.61 0.61 0.63 0.53 0.42 0.42 0.42 0.58 0.34 0.62 0.21 0.29 0.36 0.6 0.61 0.57 0.6**

**0.34 0.4 0.31 0.47 0.44 0.46 0.43 0.42 0.42 0.35 0.4 0.34 0.4 0.31 0.46 0.49 0.49 0.42 0.09 0.35 0.46 0.18 0.15 0.62 0.62 0.37 1 0.62 0.53 0.53 0.52 -0.08 0.64 0.64 0.62 0.56 0.52 0.45 0.35 0.35 0.35 0.49 0.27 0.55 0.13 0.26 0.27 0.56 0.49 0.6 0.55**

**0.55 0.64 0.48 0.8 0.7 0.72 0.64 0.64 0.65 0.54 0.65 0.56 0.65 0.48 0.87 0.79 0.87 0.7 0.14 0.58 0.73 0.22 0.13 0.97 0.98 0.62 0.62 1 0.79 0.77 0.79 -0.15 0.99 0.98 0.98 0.95 0.93 0.82 0.67 0.66 0.66 0.88 0.54 0.96 0.34 0.47 0.54 0.96 0.91 0.92 0.93**

**0.71 0.8 0.59 0.6 0.51 0.5 0.85 0.84 0.86 0.7 0.81 0.72 0.8 0.59 0.62 0.57 0.66 0.51 0.06 0.43 0.51 0.15 0.08 0.75 0.76 0.41 0.53 0.79 1 0.97 0.99 -0.17 0.81 0.81 0.81 0.74 0.68 0.62 0.51 0.5 0.51 0.66 0.41 0.72 0.24 0.38 0.42 0.76 0.68 0.74 0.71**

**0.7 0.8 0.57 0.57 0.49 0.47 0.86 0.87 0.87 0.71 0.8 0.71 0.81 0.57 0.59 0.54 0.63 0.49 0.06 0.41 0.48 0.14 0.06 0.73 0.74 0.39 0.53 0.77 0.97 1 0.97 -0.17 0.79 0.8 0.79 0.71 0.65 0.59 0.49 0.48 0.49 0.63 0.39 0.69 0.22 0.37 0.42 0.73 0.65 0.71 0.68**

**0.71 0.79 0.59 0.59 0.51 0.49 0.85 0.85 0.87 0.7 0.8 0.71 0.8 0.59 0.61 0.56 0.65 0.51 0.06 0.43 0.5 0.15 0.08 0.74 0.76 0.41 0.52 0.79 0.99 0.97 1 -0.17 0.8 0.81 0.81 0.74 0.68 0.62 0.51 0.5 0.51 0.65 0.41 0.72 0.24 0.38 0.42 0.76 0.68 0.74 0.71**

**-0.19 -0.21 -0.1 -0.12 -0.14 -0.05 -0.21 -0.21 -0.2 -0.22 -0.21 -0.2 -0.22 -0.1 -0.18 -0.13 -0.14 -0.15 -0.08 -0.13 -0.05 -0.01 0.05 -0.16 -0.16 -0.15 -0.08 -0.15 -0.17 -0.17 -0.17 1 -0.15 -0.15 -0.15 -0.16 -0.17 -0.14 -0.1 -0.1 -0.1 -0.15 -0.08 -0.16 -0.04 -0.08 -0.11 -0.15 -0.16 -0.14 -0.15**

**0.53 0.61 0.46 0.78 0.68 0.7 0.65 0.64 0.65 0.51 0.62 0.54 0.62 0.47 0.87 0.76 0.85 0.68 0.13 0.56 0.71 0.21 0.12 0.96 0.97 0.61 0.64 0.99 0.81 0.79 0.8 -0.15 1 1 1 0.93 0.92 0.8 0.65 0.63 0.64 0.87 0.52 0.94 0.31 0.44 0.52 0.95 0.91 0.91 0.92**

**0.53 0.62 0.46 0.78 0.68 0.7 0.65 0.65 0.66 0.52 0.62 0.54 0.63 0.47 0.87 0.77 0.85 0.68 0.13 0.56 0.71 0.21 0.12 0.96 0.97 0.61 0.64 0.98 0.81 0.8 0.81 -0.15 1 1 1 0.93 0.92 0.81 0.65 0.64 0.64 0.87 0.52 0.94 0.32 0.45 0.52 0.95 0.9 0.91 0.92**

**0.53 0.62 0.46 0.78 0.68 0.7 0.65 0.65 0.66 0.52 0.62 0.54 0.63 0.47 0.86 0.76 0.85 0.68 0.13 0.56 0.71 0.21 0.12 0.95 0.97 0.61 0.62 0.98 0.81 0.79 0.81 -0.15 1 1 1 0.93 0.92 0.8 0.65 0.64 0.64 0.86 0.52 0.94 0.32 0.45 0.52 0.95 0.9 0.91 0.92**

**0.52 0.6 0.41 0.78 0.66 0.65 0.59 0.59 0.59 0.58 0.6 0.52 0.61 0.42 0.91 0.73 0.86 0.66 0.12 0.55 0.66 0.19 0.1 0.92 0.93 0.61 0.56 0.95 0.74 0.71 0.74 -0.16 0.93 0.93 0.93 1 0.95 0.79 0.62 0.6 0.61 0.86 0.48 0.95 0.28 0.5 0.59 0.91 0.91 0.87 0.91**

**0.49 0.54 0.39 0.8 0.65 0.66 0.53 0.53 0.53 0.46 0.55 0.49 0.55 0.4 0.97 0.74 0.88 0.66 0.13 0.54 0.67 0.18 0.08 0.91 0.93 0.63 0.52 0.93 0.68 0.65 0.68 -0.17 0.92 0.92 0.92 0.95 1 0.85 0.68 0.66 0.67 0.93 0.55 0.98 0.34 0.44 0.54 0.92 0.94 0.86 0.93**

**0.44 0.49 0.38 0.68 0.59 0.6 0.48 0.48 0.48 0.39 0.5 0.44 0.5 0.39 0.78 0.66 0.74 0.59 0.12 0.49 0.61 0.18 0.1 0.8 0.81 0.53 0.45 0.82 0.62 0.59 0.62 -0.14 0.8 0.81 0.8 0.79 0.85 1 0.96 0.95 0.95 0.99 0.89 0.91 0.73 0.37 0.43 0.77 0.76 0.74 0.79**

**0.36 0.42 0.35 0.54 0.49 0.5 0.4 0.4 0.4 0.32 0.43 0.36 0.42 0.36 0.59 0.55 0.58 0.48 0.1 0.4 0.5 0.17 0.1 0.65 0.66 0.42 0.35 0.67 0.51 0.49 0.51 -0.1 0.65 0.65 0.65 0.62 0.68 0.96 1 1 1 0.9 0.98 0.78 0.89 0.28 0.32 0.6 0.56 0.59 0.62**

**0.35 0.41 0.34 0.53 0.48 0.49 0.39 0.39 0.39 0.31 0.42 0.35 0.41 0.35 0.57 0.54 0.57 0.48 0.1 0.4 0.49 0.17 0.1 0.64 0.65 0.42 0.35 0.66 0.5 0.48 0.5 -0.1 0.63 0.64 0.64 0.6 0.66 0.95 1 1 1 0.89 0.99 0.76 0.9 0.27 0.3 0.58 0.55 0.58 0.6**

**0.35 0.41 0.35 0.54 0.49 0.5 0.39 0.4 0.4 0.32 0.42 0.35 0.42 0.35 0.58 0.54 0.58 0.48 0.1 0.4 0.5 0.17 0.1 0.65 0.65 0.42 0.35 0.66 0.51 0.49 0.51 -0.1 0.64 0.64 0.64 0.61 0.67 0.95 1 1 1 0.9 0.99 0.77 0.89 0.28 0.31 0.59 0.56 0.59 0.61**

**0.47 0.52 0.4 0.74 0.63 0.64 0.51 0.51 0.51 0.42 0.53 0.47 0.53 0.41 0.86 0.7 0.81 0.63 0.13 0.52 0.65 0.19 0.1 0.86 0.87 0.58 0.49 0.88 0.66 0.63 0.65 -0.15 0.87 0.87 0.86 0.86 0.93 0.99 0.9 0.89 0.9 1 0.82 0.96 0.63 0.4 0.48 0.84 0.84 0.8 0.86**

**0.28 0.33 0.29 0.43 0.4 0.41 0.32 0.32 0.32 0.25 0.34 0.28 0.34 0.3 0.45 0.45 0.46 0.39 0.09 0.33 0.41 0.15 0.09 0.52 0.53 0.34 0.27 0.54 0.41 0.39 0.41 -0.08 0.52 0.52 0.52 0.48 0.55 0.89 0.98 0.99 0.99 0.82 1 0.66 0.94 0.21 0.23 0.46 0.42 0.46 0.48**

**0.52 0.59 0.44 0.8 0.68 0.69 0.57 0.57 0.57 0.5 0.59 0.52 0.59 0.45 0.92 0.76 0.87 0.68 0.13 0.56 0.7 0.21 0.11 0.93 0.95 0.62 0.55 0.96 0.72 0.69 0.72 -0.16 0.94 0.94 0.94 0.95 0.98 0.91 0.78 0.76 0.77 0.96 0.66 1 0.46 0.46 0.53 0.92 0.9 0.89 0.93**

**0.14 0.2 0.2 0.25 0.27 0.27 0.18 0.18 0.18 0.14 0.21 0.15 0.2 0.21 0.25 0.29 0.27 0.26 0.06 0.22 0.27 0.13 0.07 0.33 0.33 0.21 0.13 0.34 0.24 0.22 0.24 -0.04 0.31 0.32 0.32 0.28 0.34 0.73 0.89 0.9 0.89 0.63 0.94 0.46 1 0.09 0.08 0.24 0.2 0.25 0.27**

**0.35 0.42 0.25 0.4 0.34 0.31 0.33 0.34 0.33 0.36 0.41 0.31 0.38 0.24 0.39 0.37 0.42 0.33 0.06 0.28 0.31 0.15 0.05 0.46 0.46 0.29 0.26 0.47 0.38 0.37 0.38 -0.08 0.44 0.45 0.45 0.5 0.44 0.37 0.28 0.27 0.28 0.4 0.21 0.46 0.09 1 0.75 0.46 0.43 0.46 0.44**

**0.34 0.4 0.19 0.43 0.38 0.31 0.35 0.36 0.36 0.39 0.39 0.34 0.4 0.19 0.49 0.41 0.47 0.39 0.07 0.32 0.31 0.11 0.02 0.53 0.53 0.36 0.27 0.54 0.42 0.42 0.42 -0.11 0.52 0.52 0.52 0.59 0.54 0.43 0.32 0.3 0.31 0.48 0.23 0.53 0.08 0.75 1 0.54 0.55 0.48 0.49**

**0.55 0.6 0.45 0.8 0.67 0.69 0.61 0.61 0.62 0.5 0.61 0.56 0.62 0.46 0.87 0.75 0.87 0.67 0.13 0.55 0.7 0.19 0.1 0.92 0.94 0.6 0.56 0.96 0.76 0.73 0.76 -0.15 0.95 0.95 0.95 0.91 0.92 0.77 0.6 0.58 0.59 0.84 0.46 0.92 0.24 0.46 0.54 1 0.95 0.92 0.94**

**0.49 0.53 0.36 0.77 0.62 0.61 0.54 0.53 0.54 0.45 0.53 0.5 0.55 0.37 0.93 0.7 0.85 0.64 0.13 0.52 0.63 0.14 0.06 0.89 0.9 0.61 0.49 0.91 0.68 0.65 0.68 -0.16 0.91 0.9 0.9 0.91 0.94 0.76 0.56 0.55 0.56 0.84 0.42 0.9 0.2 0.43 0.55 0.95 1 0.85 0.92**

**0.54 0.59 0.46 0.78 0.65 0.68 0.58 0.58 0.59 0.48 0.6 0.54 0.6 0.47 0.8 0.73 0.84 0.65 0.13 0.54 0.69 0.21 0.15 0.9 0.91 0.57 0.6 0.92 0.74 0.71 0.74 -0.14 0.91 0.91 0.91 0.87 0.86 0.74 0.59 0.58 0.59 0.8 0.46 0.89 0.25 0.46 0.48 0.92 0.85 1 0.95**

**0.54 0.58 0.46 0.81 0.66 0.7 0.57 0.57 0.57 0.48 0.59 0.55 0.59 0.47 0.88 0.75 0.88 0.66 0.13 0.54 0.71 0.2 0.12 0.91 0.92 0.6 0.55 0.93 0.71 0.68 0.71 -0.15 0.92 0.92 0.92 0.91 0.93 0.79 0.62 0.6 0.61 0.86 0.48 0.93 0.27 0.44 0.49 0.94 0.92 0.95 1**

**eigenvalue proportion cumulative**

**29.32003 0.5749 0.5749 -0.17848.0-0.17645.0-0.17664.0-0.17663.0-0.17665.0...**

**5.71766 0.11211 0.68701 -0.2556.0-0.2527.0-0.24910.0-0.2498.0-0.2481.0...**

**3.44713 0.06759 0.7546 0.42375.0+0.38173.0+0.33470.0+0.33 71.0+0.32869.0...**

**2.47154 0.04846 0.80307 0.47737.0+0.35438.0+0.2944.0+0.28936.0+0.22534.0...**

**2.14644 0.04209 0.84515 0.40241.0+0.3325.0+0.30340.0+0.30339.0+0.28 2.0...**

**1.25633 0.02463 0.86979 -0.61176.0-0.55277.0-0.34540.0-0.18241.0+0.12847.0...**

**1.15907 0.02273 0.89251 -0.3841.0+0.35313.0+0.3482.0-0.28440.0-0.25247.0...**

**0.99784 0.01957 0.91208 -0.88562.0+0.23846.0-0.17747.0-0.12776.0+0.09520.0...**

**0.85534 0.01677 0.92885 -0.68240.0+0.39646.0+0.32241.0-0.2513.0+0.18739.0...**

**0.71884 0.01409 0.94295 0.59647.0-0.3962.0+0.24 76.0+0.2312.0+0.21713.0...**

**0.52024 0.0102 0.95315 -0.63747.0+0.34756.0+0.31854.0+0.30155.0-0.20711.0...**

**Eigenvectors**

**V1 V2 V3 V4 V5 V6 V7 V8 V9 V10 V11**

**-0.1267 -0.245 0.0078 0.083 0.0735 -0.0223 0.1848 0.062 -0.0544 -0.1459 -0.2061 0.0**

**-0.1383 -0.2482 0.025 0.0665 -0.013 -0.089 -0.0368 0.0227 0.0173 -0.0807 -0.1189 1.0**

**-0.1097 -0.1693 0.0092 0.1625 0.2798 0.1066 0.3484 -0.0658 -0.0158 0.2313 0.1444 2.0**

**-0.1533 0.0832 -0.1007 -0.0276 0.2155 -0.0982 0.0121 0.0639 -0.2514 -0.1576 -0.0373 3.0**

**-0.1351 0.1463 -0.1749 0.2936 -0.0747 -0.0486 -0.059 -0.021 -0.0412 -0.0208 -0.0019 4.0**

**-0.1367 0.11 -0.1047 0.0339 0.3322 0.0356 0.0809 0.0044 0.0891 0.0688 0.0406 5.0**

**-0.1373 -0.2552 0.021 0.048 -0.0418 0.0113 -0.1469 0.0037 0.0364 -0.066 0.0034 6.0**

**-0.1367 -0.2517 0.0239 0.0429 -0.0526 -0.0018 -0.1617 0.0038 0.0395 -0.0696 0.0113 7.0**

**-0.1379 -0.2492 0.0198 0.0467 -0.0404 0.009 -0.1602 -0.0041 0.0499 -0.0659 0.0483 8.0**

**-0.1167 -0.2399 0.0158 0.0223 -0.0814 -0.1163 -0.107 0.059 0.0434 -0.127 -0.2012 9.0**

**-0.141 -0.2493 0.0219 0.0853 0.0386 -0.0571 0.041 0.0156 0.0049 -0.0481 -0.0927 10.0**

**-0.1271 -0.2438 0.0093 0.0805 0.0675 0.0021 0.1758 0.0701 -0.0517 -0.161 -0.2066 11.0**

**-0.1392 -0.2465 0.0272 0.056 -0.0354 -0.056 -0.0513 0.0412 0.0237 -0.1178 -0.1326 12.0**

**-0.111 -0.169 0.0116 0.16 0.2744 0.1195 0.353 -0.0589 -0.0136 0.2166 0.1351 13.0**

**-0.156 0.0964 -0.0422 -0.1727 -0.09 0.071 0.0916 0.0946 -0.1143 -0.1787 -0.0273 20.0**

**-0.1498 0.1416 -0.1633 0.2248 0.0221 -0.0381 -0.0211 -0.0124 -0.058 -0.0173 0.006 34.0**

**-0.1641 0.072 -0.0838 -0.0712 0.1265 0.0418 0.1411 0.0926 0.0559 -0.1487 -0.0828 35.0**

**-0.1329 0.1321 -0.1628 0.2894 -0.1891 0.0347 0.0359 -0.0211 0.0365 -0.0109 -0.0114 36.0**

**-0.0355 0.1392 -0.2005 0.4766 -0.2468 0.0268 0.029 -0.0001 0.0781 -0.0421 -0.0085 37.0**

**-0.112 0.1164 -0.1621 0.3542 -0.2544 0.0381 0.0545 -0.0655 -0.0247 0.0014 -0.0092 38.0**

**-0.1376 0.1065 -0.0992 0.0187 0.3027 0.0857 0.1208 0.013 0.1867 0.069 0.0279 39.0**

**-0.0464 0.0666 -0.0738 0.1057 0.3032 -0.3453 -0.284 -0.0602 -0.6817 0.0049 0.0925 40.0**

**-0.0305 0.1107 -0.1163 0.0868 0.402 -0.1819 -0.3798 0.0809 0.3216 -0.1386 -0.0623 41.0**

**-0.1745 0.077 -0.061 -0.0922 0.0184 0.0267 -0.065 0.0253 0.0975 0.0218 -0.017 44.0**

**-0.1764 0.0716 -0.0566 -0.0959 0.0061 0.0348 -0.0495 0.012 0.0671 0.0225 -0.0039 45.0**

**-0.1161 0.1517 -0.1147 -0.0686 0.1653 -0.0322 -0.1192 0.2382 0.3962 -0.1321 0.0074 46.0**

**-0.1101 0.0086 -0.0731 -0.0594 0.0125 0.1277 -0.2516 -0.1771 -0.0117 0.5958 -0.6367 47.0**

**-0.1781 0.0443 -0.0338 -0.0953 -0.0396 0.0464 -0.0168 -0.0454 -0.0293 0.041 0.0186 48.0**

**-0.157 -0.143 -0.0064 -0.0097 -0.0376 0.068 -0.1826 -0.0865 0.0421 0.0924 0.3185 54.0**

**-0.1532 -0.1544 -0.004 -0.0091 -0.0506 0.0622 -0.2107 -0.0892 0.0491 0.1005 0.3013 55.0**

**-0.1564 -0.1433 -0.0031 -0.0091 -0.0401 0.0653 -0.1821 -0.0898 0.0469 0.0854 0.3467 56.0**

**0.0353 0.0482 0.0117 -0.0354 0.1179 0.0391 0.0262 -0.8851 0.1211 -0.3904 -0.0974 62.0**

**-0.1756 0.0415 -0.0404 -0.1101 -0.0499 0.0892 -0.0528 -0.0613 -0.0285 0.0856 0.0709 63.0**

**-0.1758 0.0408 -0.0389 -0.109 -0.0516 0.0774 -0.0607 -0.0621 -0.0244 0.0841 0.0762 64.0**

**-0.1756 0.0395 -0.0386 -0.1074 -0.0497 0.079 -0.054 -0.0658 -0.0199 0.0811 0.1019 65.0**

**-0.17 0.0475 -0.0465 -0.137 -0.0865 -0.0132 0.0258 -0.001 -0.0405 -0.0424 -0.0263 66.0**

**-0.1687 0.0883 -0.0104 -0.1396 -0.0736 0.0383 0.0845 0.0518 -0.0884 -0.1063 -0.0383 67.0**

**-0.1578 0.1179 0.2231 -0.0032 -0.0325 -0.0059 0.0279 0.016 -0.0218 -0.0313 -0.029 68.0**

**-0.1341 0.12 0.3276 0.0787 -0.0003 -0.034 -0.0101 -0.0034 0.0185 0.0128 -0.013 69.0**

**-0.1319 0.1213 0.3335 0.0837 0.0024 -0.0322 -0.0143 -0.0041 0.0183 0.0148 -0.0159 70.0**

**-0.1332 0.1206 0.3303 0.081 0.0009 -0.0332 -0.0119 -0.0037 0.0184 0.0137 -0.0143 71.0**

**-0.1662 0.1126 0.1586 -0.0452 -0.0462 0.0074 0.0462 0.0275 -0.0429 -0.0553 -0.0327 72.0**

**-0.1122 0.1236 0.3813 0.1189 0.0142 -0.0445 -0.0238 -0.0037 0.0345 0.0228 -0.0082 73.0**

**-0.1751 0.0849 0.0444 -0.0887 -0.0465 0.0192 0.0501 0.0122 -0.0578 -0.0408 -0.0325 74.0**

**-0.0755 0.1242 0.4228 0.1705 0.0387 -0.0477 -0.0488 0.0005 0.0463 0.0189 0.0101 75.0**

**-0.0901 -0.0157 -0.0612 -0.0963 -0.0963 -0.6111 0.2128 -0.1272 0.1566 0.2401 0.032 76.0**

**-0.0998 0.0032 -0.0687 -0.1398 -0.1652 -0.5522 0.179 -0.0707 0.1547 0.1 0.0685 77.0**

**-0.1713 0.04 -0.0691 -0.1294 -0.0544 0.0611 0.0427 -0.0292 -0.0585 -0.0326 0.0398 78.0**

**-0.162 0.064 -0.0696 -0.1733 -0.1024 0.0593 0.0836 0.0348 -0.0774 -0.1413 0.0225 79.0**

**-0.1663 0.0397 -0.0621 -0.1043 -0.0155 0.0651 0.0098 -0.0558 -0.0538 0.0662 -0.0509 80.0**

**-0.1692 0.0572 -0.0539 -0.1197 -0.0244 0.076 0.0814 -0.0028 -0.0857 -0.0446 -0.0523 81.0**

**Ranked attributes:**

**0.4251 1 -0.17848.0-0.17645.0-0.17664.0-0.17663.0-0.17665.0...**

**0.313 2 -0.2556.0-0.2527.0-0.24910.0-0.2498.0-0.2481.0...**

**0.2454 3 0.42375.0+0.38173.0+0.33470.0+0.33 71.0+0.32869.0...**

**0.1969 4 0.47737.0+0.35438.0+0.2944.0+0.28936.0+0.22534.0...**

**0.1548 5 0.40241.0+0.3325.0+0.30340.0+0.30339.0+0.28 2.0...**

**0.1302 6 -0.61176.0-0.55277.0-0.34540.0-0.18241.0+0.12847.0...**

**0.1075 7 -0.3841.0+0.35313.0+0.3482.0-0.28440.0-0.25247.0...**

**0.0879 8 -0.88562.0+0.23846.0-0.17747.0-0.12776.0+0.09520.0...**

**0.0711 9 -0.68240.0+0.39646.0+0.32241.0-0.2513.0+0.18739.0...**

**0.0571 10 0.59647.0-0.3962.0+0.24 76.0+0.2312.0+0.21713.0...**

**0.0469 11 -0.63747.0+0.34756.0+0.31854.0+0.30155.0-0.20711.0...**

**Selected attributes: 1,2,3,4,5,6,7,8,9,10,11 : 11**

**4)**

**Attribute Evaluator: ReliefAttributeEval**

**Search Method : Ranker**

**Using full training set**

**Output:**

**=== Attribute Selection on all input data ===**

**Search Method:**

**Attribute ranking.**

**Attribute Evaluator (supervised, Class (numeric): 83 82.0):**

**ReliefF Ranking Filter**

**Instances sampled: all**

**Number of nearest neighbours (k): 10**

**Equal influence nearest neighbours**

**Ranked attributes:**

**0.0350747 3 2.0**

**0.034513 14 13.0**

**0.0314678 77 76.0**

**0.0284686 75 74.0**

**0.028443 69 68.0**

**0.0283805 80 79.0**

**0.0280151 73 72.0**

**0.0272701 79 78.0**

**0.0268102 71 70.0**

**0.0266785 72 71.0**

**0.0266104 74 73.0**

**0.0265845 70 69.0**

**0.0265206 82 81.0**

**0.0260032 76 75.0**

**0.0245417 55 54.0**

**0.0244593 57 56.0**

**0.0244219 1 0.0**

**0.0241011 12 11.0**

**0.0224546 47 46.0**

**0.0221926 78 77.0**

**0.0210299 81 80.0**

**0.0202936 56 55.0**

**0.0191691 67 66.0**

**0.0191233 11 10.0**

**0.0182165 10 9.0**

**0.0180318 68 67.0**

**0.0168778 7 6.0**

**0.0165637 21 20.0**

**0.0163263 9 8.0**

**0.0126703 8 7.0**

**0.0113365 13 12.0**

**0.0112975 49 48.0**

**0.0112032 48 47.0**

**0.0111742 2 1.0**

**0.0095682 65 64.0**

**0.0092931 40 39.0**

**0.0080364 6 5.0**

**0.0076923 66 65.0**

**0.007068 45 44.0**

**0.0068813 46 45.0**

**0.0059425 64 63.0**

**0.002815 36 35.0**

**0.0009072 4 3.0**

**0.0004057 42 41.0**

**0.000256 37 36.0**

**0.0002226 41 40.0**

**0.0000389 39 38.0**

**0 33 32.0**

**0 51 50.0**

**0 44 43.0**

**0 50 49.0**

**0 15 14.0**

**0 53 52.0**

**0 16 15.0**

**0 52 51.0**

**0 54 53.0**

**0 19 18.0**

**0 61 60.0**

**0 62 61.0**

**0 60 59.0**

**0 58 57.0**

**0 59 58.0**

**0 17 16.0**

**0 18 17.0**

**0 28 27.0**

**0 29 28.0**

**0 20 19.0**

**0 30 29.0**

**0 32 31.0**

**0 31 30.0**

**0 27 26.0**

**0 26 25.0**

**0 25 24.0**

**0 24 23.0**

**0 43 42.0**

**0 22 21.0**

**0 23 22.0**

**0 34 33.0**

**-0.0018432 35 34.0**

**-0.0020092 5 4.0**

**-0.0022331 38 37.0**

**-0.0027031 63 62.0**

**Selected attributes: 3,14,77,75,69,80,73,79,71,72,74,70,82,76,55,57,1,12,47,78,81,56,67,11,10,68,7,21,9,8,13,49,48,2,65,40,6,66,45,46,64,36,4,42,37,41,39,33,51,44,50,15,53,16,52,54,19,61,62,60,58,59,17,18,28,29,20,30,32,31,27,26,25,24,43,22,23,34,35,5,38,63 : 82**