@attribute LOC\_BLANK numeric

@attribute BRANCH\_COUNT numeric

@attribute CALL\_PAIRS numeric

@attribute Defective {Y,N}

@data

6,9,2,N

15,7,3,Y

27,9,1,Y

7,3,2,N

51,25,13,N

3,5,2,N

13,9,5,N

**原始数据：**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x1 | 6 | 9 | 2 | N |
| x2 | 15 | 7 | 3 | Y |
| x3 | 27 | 9 | 1 | Y |
| x4 | 7 | 3 | 2 | N |
| x5 | 51 | 25 | 13 | N |
| x6 | 3 | 5 | 2 | N |
| x7 | 13 | 9 | 5 | N |

**规范化后的数据：**

|  |  |  |
| --- | --- | --- |
| -0.68062 | -0.07953 | -0.48038 |
| -0.14463 | -0.35791 | -0.24019 |
| 0.570018 | -0.07953 | -0.72058 |
| -0.62106 | -0.91465 | -0.48038 |
| 1.999318 | 2.147438 | 2.16173 |
| -0.85928 | -0.63628 | -0.48038 |
| -0.26374 | -0.07953 | 0.240192 |

K=2

**计算距离：**

**（1）**

|  |  |  |  |
| --- | --- | --- | --- |
| x2 | -0.14463 | -0.35791 | -0.24019 |

到

|  |  |  |  |
| --- | --- | --- | --- |
| x1 | -0.68062 | -0.07953 | -0.48038 |
| x4 | -0.62106 | -0.91465 | -0.48038 |
| x5 | 1.999318 | 2.147438 | 2.16173 |
| x6 | -0.85928 | -0.63628 | -0.48038 |
| x7 | -0.26374 | -0.07953 | 0.240192 |

的距离分别为：

|  |
| --- |
| 0.649974 |
| 0.771132 |
| 4.079523 |
| 0.803684 |
| 0.567844 |

可以得到：x1和x7为邻近样本

（2）

|  |  |  |  |
| --- | --- | --- | --- |
| x3 | 0.570018 | -0.07953 | -0.72058 |

到

|  |  |  |  |
| --- | --- | --- | --- |
| x1 | -0.68062 | -0.07953 | -0.48038 |
| x4 | -0.62106 | -0.91465 | -0.48038 |
| x5 | 1.999318 | 2.147438 | 2.16173 |
| x6 | -0.85928 | -0.63628 | -0.48038 |
| x7 | -0.26374 | -0.07953 | 0.240192 |

的距离分别为：

|  |
| --- |
| 1.273494 |
| 1.474377 |
| 3.9128 |
| 1.552596 |
| 1.272097 |

可以得到：x1和x7为邻近样本

**计算特征差值：**

（1）x2与x1

|  |  |  |
| --- | --- | --- |
| 9 | 2 | 1 |

x2与x7

|  |  |  |
| --- | --- | --- |
| 2 | 2 | 2 |

x3与x1

|  |  |  |
| --- | --- | --- |
| 21 | 0 | 1 |

x 3与x7

|  |  |  |
| --- | --- | --- |
| 14 | 0 | 4 |

**计算特征权重：（x2与x1、x7）**

W21(f1)=3 W21(f2)=2 W21(f1)=1

W27(f1)=1 W27(f2)=1 W27(f3)=1

更新特征权重：

W (f1)= W21(f1)+ W27(f1)=4 W (f2)= W21(f2)+ W27(f2)=3 W (f3)= W21(f3)+ W27(f3)=2

**计算特征权重：（x3与x1、x7）**

W31(f1)=3 W31(f2)=1 W31(f1)=2

W37(f1)=3 W37(f2)=1 W37(f3)=2

更新特征权重：

W (f1)= W31(f1)+ W37(f1)=6 W (f2)= W31(f2)+ W37(f2)=2 W (f3)= W31(f3)+ W37(f3)=4

**生成特征排序列表：**

所有特征最终权重：W (f1)=10 W (f2)=5 W (f3)=6

得到特征排序列表为：{f1,f3,f2}