Julian Marin

Lab 10

September 25, 2018

1.

Weather Condition =

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 | 2 | 2 | 0 | ? |

Weather Table =

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3 | 3 | 2 | 0 | 0 | 1.41 |
| 3 | 3 | 2 | 1 | 0 | 1.73 |
| 2 | 3 | 2 | 0 | 1 | 1 |
| 1 | 2 | 2 | 0 | 1 | 1 |
| 1 | 1 | 1 | 0 | 1 | 1.73 |
| 1 | 1 | 1 | 1 | 0 | 2 |
| 2 | 1 | 1 | 1 | 1 | 1.73 |
| 3 | 2 | 2 | 0 | 0 | 1 |
| 3 | 1 | 1 | 0 | 1 | 1.73 |
| 1 | 2 | 1 | 0 | 1 | 1.41 |
| 3 | 2 | 1 | 1 | 1 | 1.73 |
| 2 | 2 | 2 | 1 | 1 | 1 |
| 2 | 3 | 1 | 0 | 1 | 1.41 |
| 1 | 2 | 2 | 1 | 0 | 1.41 |

KNN:

K=3: 2/3 = 1 so PlayTennis would be 1 (YES)

K=5: 3/5 = 1 so PlayTennis would be 1 (YES)

NB:

YES : (9/14)\*(4/9)\*(4/9)\*(3/9)\*(6/9) = 0.0282

NO: (5/14)\*(0/5)\*(2/5)\*(4/5)\*(2/5) = 0.0