|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Počasie | Teplota [°C] | Vlhkosť [%] | Vietor | T |
| 1 | slnko | 24 | 70 | A | + |
| 2 | slnko | 27 | 90 | A | - |
| 3 | slnko | 29 | 85 | N | - |
| 4 | slnko | 22 | 98 | N | - |
| 5 | slnko | 21 | 70 | N | + |
| 6 | mrak | 22 | 90 | A | + |
| 7 | mrak | 28 | 78 | N | + |
| 8 | mrak | 18 | 65 | A | + |
| 9 | mrak | 27 | 75 | N | + |
| 10 | dážď | 22 | 80 | A | - |
| 11 | dážď | 18 | 70 | A | - |
| 12 | dážď | 24 | 80 | N | + |
| 13 | dážď | 20 | 80 | N | + |
| 14 | dážď | 21 | 96 | N | + |

**H(S0)** = - 9/14 \* log2(9/14) – 5/14 \* log2(5/14) = **0,94**

**H(slnko)** = - 2/5 \* log2(2/5) – 3/5 \* log2(3/5) = **0,971**

**H(mrak)** = 0

**H(dážď)** = - 3/5 \* log2(3/5) – 2/5 \* log2(2/5) = **0,971**

**H(S0, Počasie)** = P(slnko) \* H(slnko) + P(mrak) \* H(mrak) + P(dážď) + H(dážď) = 5/14 \* 0,971 + 0 + 5/14 \* 0,971 = **0,694**

**I(S0, Počasie)** = H(S0, Počasie) - = 0,94 – 0,694 = **0,246**

**Hp(S0, Počasie)** = P(slnko) \* log2(slnko) - P(mrak) \* log2(mrak) - P(dážď) \* log2(dážď) = 5/14 \* log2(5/14) - 4/14 \* log2(4/14) - 5/14 \* log2(5/14) = **1,577**

**Ip(S0, Počasie)** = **I(S0, Počasie) / Hp(S0, Počasie)** = 0,246 / 1,577 = **0,156**

**T** = {18, 20, 21, 22, 24, 27, 28, 29}

**Prahy** = {19, 20.5, 21.5, 23, 25.5, 27.5, 28.5}

**H(S0, T < 19)** = - 1/2 \* log2(1/2) - 1/2 \* log2(1/2) = **1**

**H(S0, T > 19)** = - 8/12 \* log2(8/12) – 4/12 \* log2(4/12) = **0,918**

**H(S0, T(19))** = 0,918 \* 12/14 + 1 \* 2/14 = **0,93**

**I(S0, T(19))** = 0,94 – 0,93 = **0,01**

**Hp(S0, T(19))** = - P(T > 19) \* log2(P(T > 19)) - P(T < 19) \* log2(P(T < 19)) = - 2/14 \* log2(2/14) - 12/14 \* log2(12/14) = **0,592**

**Ip(S0, T(19))** = 0,01 / 0,592 = **0,017**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **P** | 19 | 20,5 | 21,5 | 23 | 25,5 | 27,5 | 28,5 |
| **Ip(T(P))** | 0,017 | 0 | 0,048 | 0,001 | 0,029 | 0,017 | 0,304 |

* **Ip(S0, Teplota(28,5)) = 0,304**
* **Ip(S0, Vlhkosť(95,5)) = 0,129**
* **Ip(S0, Vietor) = 0,049**

**Teplota (28,5)**

< 28,5 > 28,5

NEHRÁ SA

2. Iterácia

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Počasie** | **Vlhkosť** | **Vietor** |
| **Ip(S1, ATR)** | 0,133 | 0,11 | 0,11 |

3. Iterácia

|  |  |  |
| --- | --- | --- |
|  | **Vlhkosť** | **Vietor** |
| **Ip(S2, ATR) slnko** | 1 (80) | 0 |
| **Ip(S3, ATR) dážď** | 0,446 (75) | 1 |

**TEPLOTA (28,5)**

< 28,5 > 28,5

**POČASIE** NEHRÁ SA

Slnko Mrak dážď

HRÁ SA

**VLHKOSŤ** **VIETOR**

< 80 > 80 A N

HRÁ SA NEHRÁ SA NEHRÁ SA HRÁ SA