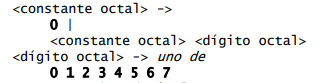
***TP Autómata como reconocedor y accionador***

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Curso: K2003

Autómata que reconoce una constante octal:



M = {Q, **Σ,**T,Q₀,F} con:

Q = {0,1,2,3}

**Σ** = {+,-,0,1,2,3,4,5,6,7}

Q₀ = 0

F = {2}

T = la función de transiciones, representada por la TT:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **{1,2,3,4,5,6,7}** | **+** | **-** | **0** |
| **0-** | 3 | 1 | 1 | 2 |
| **1** | 3 | 3 | 3 | 2 |
| **2+** | 2 | 3 | 3 | 2 |
| **3** | 3 | 3 | 3 | 3 |

+,-

+,-

0,1,2,3,4,5,6,7

+,-

1,2,3,4,5,6,7

Autómata que reconoce una constante hexadecimal:

0

0



M = {Q, **Σ,**T,Q₀,F} con:

Q = {0,1,2,3,4}

**Σ** = {+,-,0,1,2,3,4,5,6,7,8,9,a,b,c,d,e,f,A,B,C,D,E,F,x,X}

Q₀ = 0

F = {3}

T = la función de transiciones, representada por la TT:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **DyL** | **+** | **-** | **0** | **x,X** |
| **0-** | 4 | 1 | 1 | 2 | 4 |
| **1** | 4 | 4 | 4 | 2 | 4 |
| **2** | 4 | 4 | 4 | 4 | 3 |
| **3+** | 3 | 4 | 4 | 3 | 4 |
| **4** | 4 | 4 | 4 | 4 | 4 |

Con DyL = {1,2,3,4,5,6,7,8,9,a,b,c,d,e,f,A,B,C,D,E,F}

+,-,x,X

DyL,x,X

0

+,-

DyL,+,-,x,X

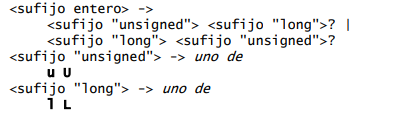
DyL,+,-,0

DyL,0

0

X,x

Autómata que reconoce sufijos:



M = {Q, **Σ,**T,Q₀,F} con:

Q = {0,1,2,3,4}

**Σ** = {U,u,l,L}

Q₀ = 0

F = {1,2,3}

T = la función de transiciones, representada por la TT:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **U** | **u** | **L** | **l** |
| **0-** | 1 | 1 | 2 | 2 |
| **1+** | 4 | 4 | 3 | 3 |
| **2+** | 3 | 3 | 4 | 4 |
| **3+** | 4 | 4 | 4 | 4 |
| **4** | 4 | 4 | 4 | 4 |

U,u

L,l

U,u,l,L

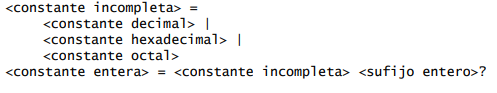
L,l

U,u

L,l

U,u

Autómata que reconoce una constante decimal y sufijo:



M = {Q, **Σ,**T,Q₀,F} con:

Q = {0,1,2,3,4,5,6}

**Σ** = {+,-,0,1,2,3,4,5,6,7,8,9,u,U,l,L}

Q₀ = 0

F = {2,3,4,5}

T = la función de transiciones, representada por la TT:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **{1,2,3,4,5,6,7,8,9}** | **+** | **-** | **0** | **U,u** | **L,l** |
| **0-** | 2 | 1 | 1 | 6 | 6 | 6 |
| **1** | 2 | 6 | 6 | 2 | 6 | 6 |
| **2+** | 2 | 6 | 6 | 2 | 3 | 4 |
| **3+** | 6 | 6 | 6 | 6 | 6 | 5 |
| **4+** | 6 | 6 | 6 | 6 | 5 | 6 |
| **5+** | 6 | 6 | 6 | 6 | 6 | 6 |
| **6** | 6 | 6 | 6 | 6 | 6 | 6 |

Σ – {0,1,2,3,4,5,6,7,8,9}

+,-

{0,1,2,3,4,5,6,7,8,9}

{1,2,3,4,5,6,7,8,9}

U,u

L,l

0,U,u,l,L

L,l

U,u

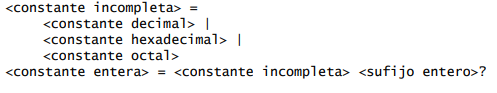
+,-

Σ – {u,U}

Σ – {l,L}

Σ

Autómata que reconoce una constante octal y sufijo:



M = {Q, **Σ,**T,Q₀,F} con:

Q = {0,1,2,3,4,5,6,7}

**Σ** = {+,-,0,1,2,3,4,5,6,7,u,U,l,L}

Q₀ = 0

F = {2,3,4,5,6}

T = la función de transiciones, representada por la TT:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **{1,2,3,4,5,6,7}** | **+** | **-** | **0** | **U,u** | **L,l** |
| **0-** | 7 | 1 | 1 | 2 | 7 | 7 |
| **1** | 7 | 7 | 7 | 2 | 7 | 7 |
| **2+** | 3 | 7 | 7 | 3 | 7 | 7 |
| **3+** | 3 | 7 | 7 | 3 | 4 | 5 |
| **4+** | 7 | 7 | 7 | 7 | 7 | 6 |
| **5+** | 7 | 7 | 7 | 7 | 6 | 7 |
| **6+** | 7 | 7 | 7 | 7 | 7 | 7 |
| **7** | 7 | 7 | 7 | 7 | 7 | 7 |

Σ – {0}

+,-

Σ – {l,L}

Σ

Σ – {u,U}

L,l

U,u

L,l

U,u

+,-,U,u,l,L

{0…7}

{0…7}

Σ – {0}

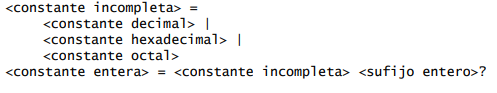
0

Σ – {+,-,0}

0

+,-

Autómata que reconoce una constante hexadecimal y sufijo:



M = {Q, **Σ,**T,Q₀,F} con:

Q = {0,1,2,3,4,5,6,7,8}

**Σ** = {+,-,0,1,2,3,4,5,6,7,8,9,a,b,c,d,e,f,A,B,C,D,E,F,x,X}

Q₀ = 0

F = {3,4,5,6,7}

T = la función de transiciones, representada por la TT:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **DyL** | **+** | **-** | **0** | **x,X** | **U,u** | **L,l** |
| **0-** | 8 | 1 | 1 | 2 | 8 | 8 | 8 |
| **1** | 8 | 8 | 8 | 2 | 8 | 8 | 8 |
| **2** | 8 | 8 | 8 | 8 | 3 | 8 | 8 |
| **3+** | 4 | 8 | 8 | 4 | 8 | 8 | 8 |
| **4+** | 4 | 8 | 8 | 4 | 8 | 5 | 6 |
| **5+** | 8 | 8 | 8 | 8 | 8 | 8 | 7 |
| **6+** | 8 | 8 | 8 | 8 | 8 | 7 | 8 |
| **7+** | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| **8** | 8 | 8 | 8 | 8 | 8 | 8 | 8 |

Con DyL = {1,2,3,4,5,6,7,8,9,a,b,c,d,e,f,A,B,C,D,E,F}

Σ – {0}

+,-,x,X

{0…9}

{0…9}

U,u

X,x

0

Σ – {l,L}

Σ

Σ – {u,U}

L,l

U,u

L,l

Σ – {x,X}

Σ – {0}

0

Σ – {+,-,0}

+,-