

Ejercicio 1: Conjunto de cadenas que empieza con la letra b y termine con las letras a c

PROPIEDADES

$S = \{1,2,3,4,5\}$

$\Sigma = \{a, b, c\}$

f = Tabla de Transiciones

$S_0 = 1$

$F = \{4\}$

DIAGRAMA

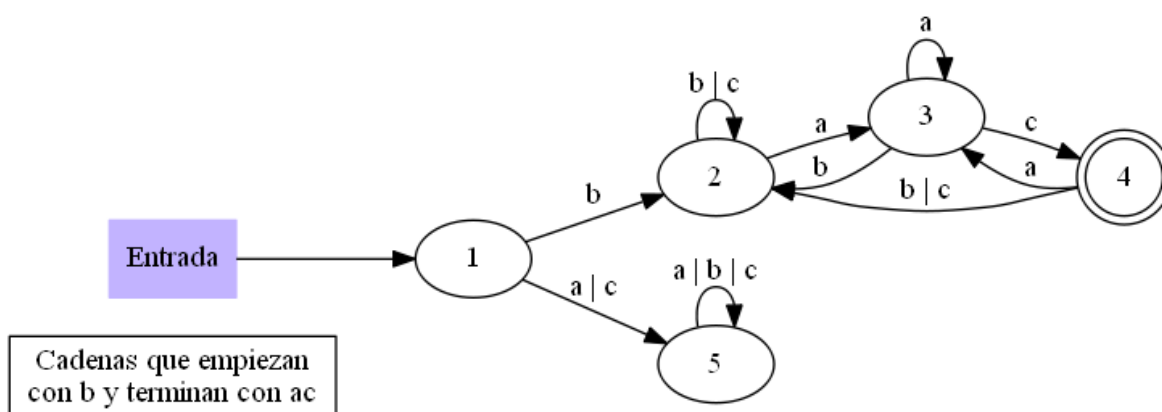


TABLA DE TRANSICIONES

	a	b	c	FDC
1	5	2	5	Error
2	3	2	2	Error
3	3	2	4	Error
4	3	2	2	Aceptación
5	5	5	5	Error

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CODIGO

```
digraph G{
    "Cadenas que empiezan con b y terminan con ac" [shape = box];
    Entrada -> 1;
    1 -> 2 [label="b"];
    1 -> 5 [label="a | c"];
    2 -> 3 [label="a"];
    2 -> 2 [label="b | c"];
    3 -> 3 [label="a"];
    3 -> 2 [label="b"];
    3 -> 4 [label="c"];
    4 -> 3 [label="a"];
    4 -> 2 [label="b | c"];
    5 -> 5 [label="a | b | c"];
    4 [shape = doublecircle];
    Entrada [shape = box,style=filled,color=".7 .3 1.0"];
    rankdir=LR;
}
```

Ejercicio 2: Conjunto de cadenas que tenga por lo menos dos letras a juntas y terminen con las letras b c

PROPIEDADES

$$S = \{1, 2, 3, 4, 5, 6, 7\}$$

$$\Sigma = \{a, b, c\}$$

f = Tabla de Transiciones

$$S_0 = 1$$

$$F = \{5\}$$

DIAGRAMA

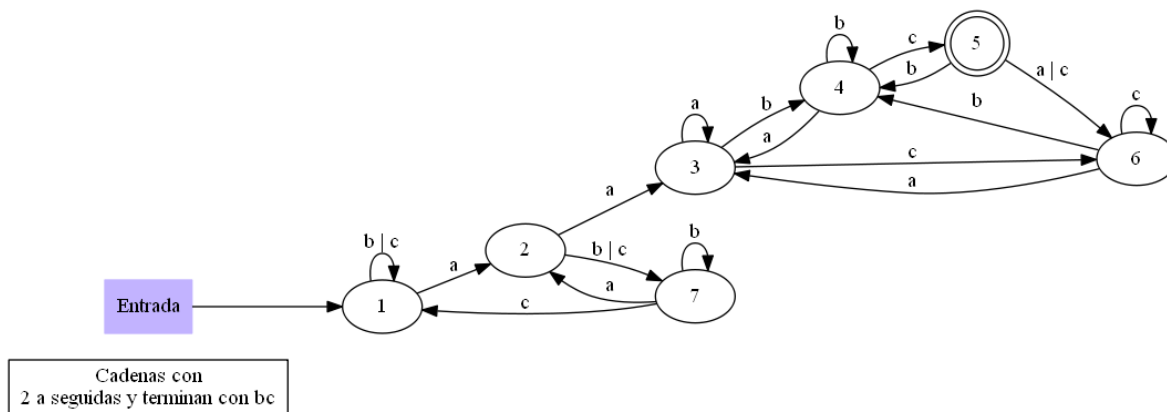


TABLA DE TRANSICIONES

	a	b	c	FDC
1	2	1	1	Error
2	3	7	7	Error
3	3	4	6	Error
4	3	4	5	Error
5	6	4	6	Aceptación
6	3	4	6	Error
7	2	7	1	Error

CODIGO

```
digraph G{
    "Cadenas con\n2 a seguidas y terminan con bc" [shape = box];
    Entrada -> 1;
    1 -> 2 [label="a"];
    1 -> 1 [label="b | c"];
    2 -> 3 [label="a"];
    2 -> 7 [label="b | c"];
    3 -> 3 [label="a"];
    3 -> 4 [label="b"];
    3 -> 6 [label="c"];
    4 -> 3 [label="a"];
    4 -> 4 [label="b"];
    4 -> 5 [label="c"];
    5 -> 6 [label="a | c"];
    5 -> 4 [label="b"];
    6 -> 3 [label="a"];
    6 -> 4 [label="b"];
    6 -> 6 [label="c"];
    7 -> 2 [label="a"];
    7 -> 7 [label="b"];
    7 -> 1 [label="c"];
    5 [shape = doublecircle];
    Entrada [shape = box,style=filled,color=".7 .3 1.0"];
    rankdir=LR;
}
```

Ejercicio 3: Conjunto de cadenas que terminen con las letras a b c

PROPIEDADES

$S = \{1,2,3,4\}$

$\Sigma = \{a, b, c\}$

f = Tabla de Transiciones

$S_0 = 1$

$F = \{4\}$

DIAGRAMA

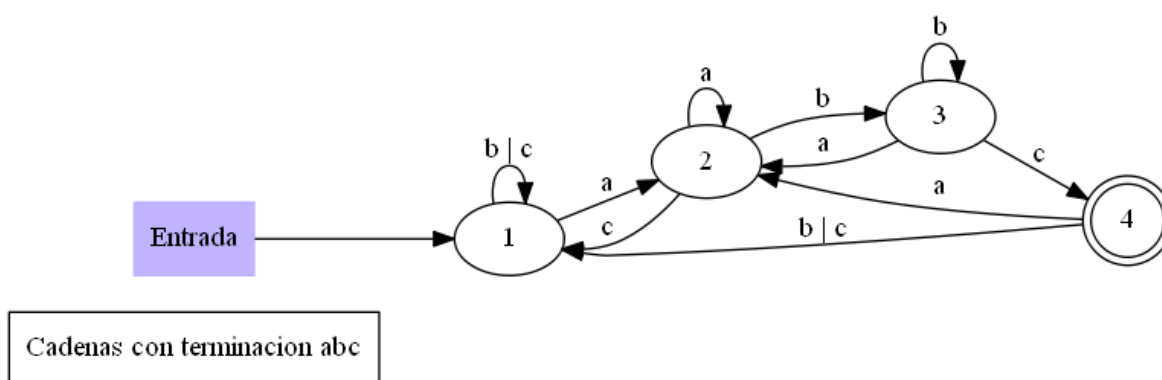


TABLA DE TRANSICIONES

	a	b	c	FDC
1	2	1	1	Error
2	2	3	1	Error
3	2	3	4	Error
4	2	1	1	Aceptación

CODIGO

```
digraph G{
    "Cadenas con terminacion abc" [shape = box];
    Entrada -> 1;
    1 -> 2 [label="a"];
    1 -> 1 [label="b | c"];
    2 -> 2 [label="a"];
    2 -> 3 [label="b"];
    2 -> 1 [label="c"];
    3 -> 2 [label="a"];
    3 -> 3 [label="b"];
    3 -> 4 [label="c"];
    4 -> 2 [label="a"];
    4 -> 1 [label="b | c"];
    4 [shape = doublecircle];
    Entrada [shape = box,style=filled,color=".7 .3 1.0"];
    rankdir=LR;
}
```