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Zadanie 2 - Program na ocenę bardzo dobrą

∑ = {a, b, c, 0, 1, 2, 3}
q0 = q0
Q = {q0, q1, q2, q3, q4, q5, q6, q7, q8, q9, q10, q11, q12, q13, q14, q15, q16, q17, q18}
A = {q9, q18}
δ = Q x ∑ ∪ {ε} -> 2^Q

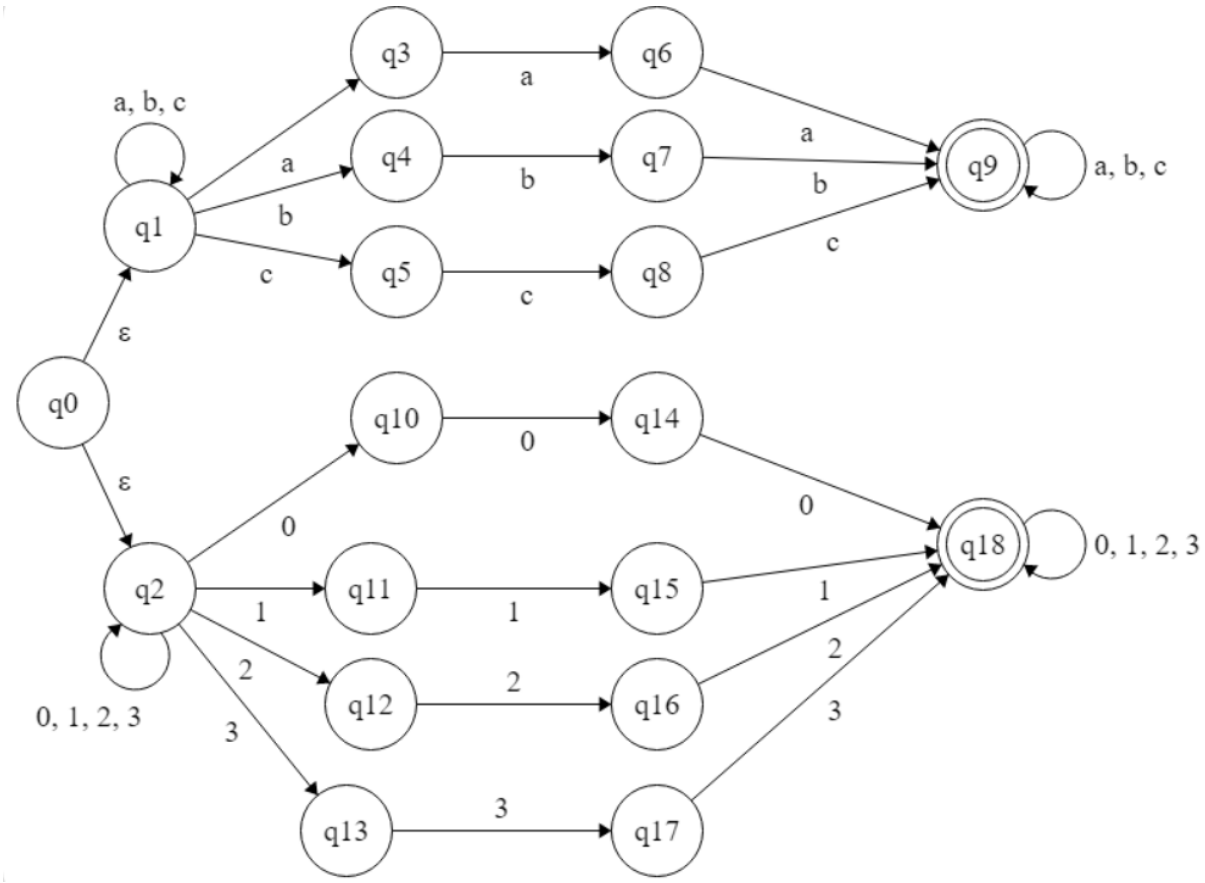
Tablica przejść:

	a	b	c	0	1	2	3	ε
q0		-	-	-	-	-	-	{q1, q2}
q1	{q1, q3}	{q1, q4}	{q1, q5}	-	-	-	-	-
q2	-	-	-	{q2, q10}	{q2, q11}	{q2, q12}	{q2, q13}	-
q3	q6	-	-	-	-	-	-	-
q4	-	q7	-	-	-	-	-	-
q5	-	-	q8	-	-	-	-	-
q6	q9	-	-	-	-	-	-	-
q7	-	q9	-	-	-	-	-	-
q8	-	-	q9	-	-	-	-	-
q9	q9	q9	q9	-	-	-	-	-
q10	-	-	-	q14	-	-	-	-
q11	-	-	-	-	q15	-	-	-
q12	-	-	-	-	-	q16	-	-
q13	-	-	-	-	-	-	q17	-
q14	-	-	-	q18	-	-	-	-
q15	-	-	-		q18			-
q16	-	-	-	-	-	q18	-	-
q17	-	-	-	-	-	-	q18	-
q18	-	-	-	q18	q18	q18	q18	-

Opis atrybutów stanów końcowych:

q9 – we wprowadzonym słowie wystąpiło potrojenie liter zdefiniowanych jako symbole alfabetu
q18 – we wprowadzonym słowie wystąpiło potrojenie cyfr zdefiniowanych jako symbole alfabetu

Model automatu:



Sprawdzenie poprawności działania (wygenerowane przez zamieszczony program w języku angielskim):

1. abbbaac

1. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[b], q1[b], q1[a], q1[a], q1[c], q1[]

Last state is not in accepting state - a path does not lead to the solution

2. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[b], q1[b], q1[a], q1[a], q1[c], q5[]

Last state is not in accepting state - a path does not lead to the solution

3. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[b], q1[b], q1[a], q1[a], q3[c]

Last state is not in accepting state - a path does not lead to the solution

4. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[b], q1[b], q1[a], q3[a], q6[c]

Last state is not in accepting state - a path does not lead to the solution

5. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[b], q1[b], q4[a]

Last state is not in accepting state - a path does not lead to the solution

6. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[b], q4[b], q7[a]

Last state is not in accepting state - a path does not lead to the solution

7. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q4[b], q7[b], q9[a], q9[a], q9[c], q9[]

Last state is in accepting state - a program is successfully finished

8. Traversed path consists of the following states: q0[ε], q1[a], q3[b]

Last state is not in accepting state - a path does not lead to the solution

9. Traversed path consists of the following states: q0[ε], q2[a]

Last state is not in accepting state - a path does not lead to the solution

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Program finished successfully - the successful path leading to the accepting state consists of the following states: **q0[ε], q1[a], q1[b], q4[b], q7[b], q9[a], q9[a], q9[c], q9[]**

2. 1111002123

1. Traversed path consists of the following states: q0[ε], q1[1]

Last state is not in accepting state - a path does not lead to the solution

2. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q2[1], q2[0], q2[0], q2[2], q2[1], q2[2], q2[3], q2[]

Last state is not in accepting state - a path does not lead to the solution

3. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q2[1], q2[0], q2[0], q2[2], q2[1], q2[2], q2[3], q13[]

Last state is not in accepting state - a path does not lead to the solution

4. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q2[1], q2[0], q2[0], q2[2], q2[1], q2[2], q12[3]

Last state is not in accepting state - a path does not lead to the solution

5. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q2[1], q2[0], q2[0], q2[2], q2[1], q11[2]

Last state is not in accepting state - a path does not lead to the solution

6. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q2[1], q2[0], q2[0], q2[2], q12[1]
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Last state is not in accepting state - a path does not lead to the solution

7. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q2[1], q2[0], q2[0], q10[2]

Last state is not in accepting state - a path does not lead to the solution

8. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q2[1], q2[0], q10[0], q14[2]

Last state is not in accepting state - a path does not lead to the solution

9. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q2[1], q11[0]

Last state is not in accepting state - a path does not lead to the solution

10. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q2[1], q11[1], q15[0]

Last state is not in accepting state - a path does not lead to the solution

11. Traversed path consists of the following states: q0[ε], q2[1], q2[1], q11[1], q15[1], q18[0], q18[0], q18[2], q18[1], q18[2], q18[3], q18[]

Last state is in accepting state - a program is successfully finished

12. Traversed path consists of the following states: q0[ε], q2[1], q11[1], q15[1], q18[1], q18[0], q18[0], q18[2], q18[1], q18[2], q18[3], q18[]

Last state is in accepting state - a program is successfully finished

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Program finished successfully - the successful path leading to the accepting state consists of the following states: **q0[ε], q2[1], q11[1], q15[1], q18[1], q18[0], q18[0], q18[2], q18[1], q18[2], q18[3], q18[]**

3. 213312

1. Traversed path consists of the following states: q0[ε], q1[2]

Last state is not in accepting state - a path does not lead to the solution

2. Traversed path consists of the following states: q0[ε], q2[2], q2[1], q2[3], q2[3], q2[1], q2[2], q2[]

Last state is not in accepting state - a path does not lead to the solution

3. Traversed path consists of the following states: q0[ε], q2[2], q2[1], q2[3], q2[3], q2[1], q2[2], q12[]

Last state is not in accepting state - a path does not lead to the solution

4. Traversed path consists of the following states: q0[ε], q2[2], q2[1], q2[3], q2[3], q2[1], q11[2]

Last state is not in accepting state - a path does not lead to the solution

5. Traversed path consists of the following states: q0[ε], q2[2], q2[1], q2[3], q2[3], q13[1]

Last state is not in accepting state - a path does not lead to the solution
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6. Traversed path consists of the following states: q0[ε], q2[2], q2[1], q2[3], q13[3], q17[1]

Last state is not in accepting state - a path does not lead to the solution

7. Traversed path consists of the following states: q0[ε], q2[2], q2[1], q11[3]

Last state is not in accepting state - a path does not lead to the solution

8. Traversed path consists of the following states: q0[ε], q2[2], q12[1]

Last state is not in accepting state - a path does not lead to the solution

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Program did not finish successfully - there is no successful path leading to the accepting state

4. abcaaac

1. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q1[a], q1[a], q1[c], q1[]

Last state is not in accepting state - a path does not lead to the solution

2. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q1[a], q1[a], q1[c], q5[]

Last state is not in accepting state - a path does not lead to the solution

3. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q1[a], q1[a], q3[c]

Last state is not in accepting state - a path does not lead to the solution

4. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q1[a], q3[a], q6[c]

Last state is not in accepting state - a path does not lead to the solution

5. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q3[a], q6[a], q9[c], q9[]

Last state is in accepting state - a program is successfully finished

6. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q5[a]

Last state is not in accepting state - a path does not lead to the solution

7. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q4[c]

Last state is not in accepting state - a path does not lead to the solution

8. Traversed path consists of the following states: q0[ε], q1[a], q3[b]

Last state is not in accepting state - a path does not lead to the solution

9. Traversed path consists of the following states: q0[ε], q2[a]

Last state is not in accepting state - a path does not lead to the solution
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Program finished successfully - the successful path leading to the accepting state consists of the following states: **q0[ε], q1[a], q1[b], q1[c], q1[a], q3[a], q6[a], q9[c], q9[]**

5. 1300002

1. Traversed path consists of the following states: q0[ε], q1[1]

Last state is not in accepting state - a path does not lead to the solution

2. Traversed path consists of the following states: q0[ε], q2[1], q2[3], q2[0], q2[0], q2[0], q2[0], q2[2], q2[]

Last state is not in accepting state - a path does not lead to the solution

3. Traversed path consists of the following states: q0[ε], q2[1], q2[3], q2[0], q2[0], q2[0], q2[0], q2[2], q12[]

Last state is not in accepting state - a path does not lead to the solution

4. Traversed path consists of the following states: q0[ε], q2[1], q2[3], q2[0], q2[0], q2[0], q2[0], q10[2]

Last state is not in accepting state - a path does not lead to the solution

5. Traversed path consists of the following states: q0[ε], q2[1], q2[3], q2[0], q2[0], q2[0], q10[0], q14[2]

Last state is not in accepting state - a path does not lead to the solution

6. Traversed path consists of the following states: q0[ε], q2[1], q2[3], q2[0], q2[0], q10[0], q14[0], q18[2], q18[]

Last state is in accepting state - a program is successfully finished

7. Traversed path consists of the following states: q0[ε], q2[1], q2[3], q2[0], q10[0], q14[0], q18[0], q18[2], q18[]

Last state is in accepting state - a program is successfully finished

8. Traversed path consists of the following states: q0[ε], q2[1], q2[3], q13[0]

Last state is not in accepting state - a path does not lead to the solution

9. Traversed path consists of the following states: q0[ε], q2[1], q11[3]

Last state is not in accepting state - a path does not lead to the solution

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Program finished successfully - the successful path leading to the accepting state consists of the following states: **q0[ε], q2[1], q2[3], q2[0], q10[0], q14[0], q18[0], q18[2], q18[]**

6. abcabcc

1. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q1[b], q1[c], q1[c], q1[]

Last state is not in accepting state - a path does not lead to the solution

2. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q1[b], q1[c], q1[c], q5[]

Last state is not in accepting state - a path does not lead to the solution

3. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q1[b], q1[c], q5[c], q8[]

Last state is not in accepting state - a path does not lead to the solution

4. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q1[b], q4[c]

Last state is not in accepting state - a path does not lead to the solution

5. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q1[a], q3[b]

Last state is not in accepting state - a path does not lead to the solution

6. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q1[c], q5[a]

Last state is not in accepting state - a path does not lead to the solution

7. Traversed path consists of the following states: q0[ε], q1[a], q1[b], q4[c]

Last state is not in accepting state - a path does not lead to the solution

8. Traversed path consists of the following states: q0[ε], q1[a], q3[b]

Last state is not in accepting state - a path does not lead to the solution

9. Traversed path consists of the following states: q0[ε], q2[a]

Last state is not in accepting state - a path does not lead to the solution

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Program did not finish successfully - there is no successful path leading to the accepting state
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