

Pentru exercise 4 am avut 2 interpretari, ambele fiind usable, astfel am creat 2 config file-uri:

->pentru config\_file\_4\_1:

presupunem ca masina Turing respinge daca inputul este corupt,  
nemaifiind folositor outputul masinii

=> astfel putem refolosi config\_file\_3

-> pentru config\_file\_4\_2:

in cazul acestei configuratii, rezultatul este dat de analiza

starii finale (q11, q12, q14, q15) astfel:

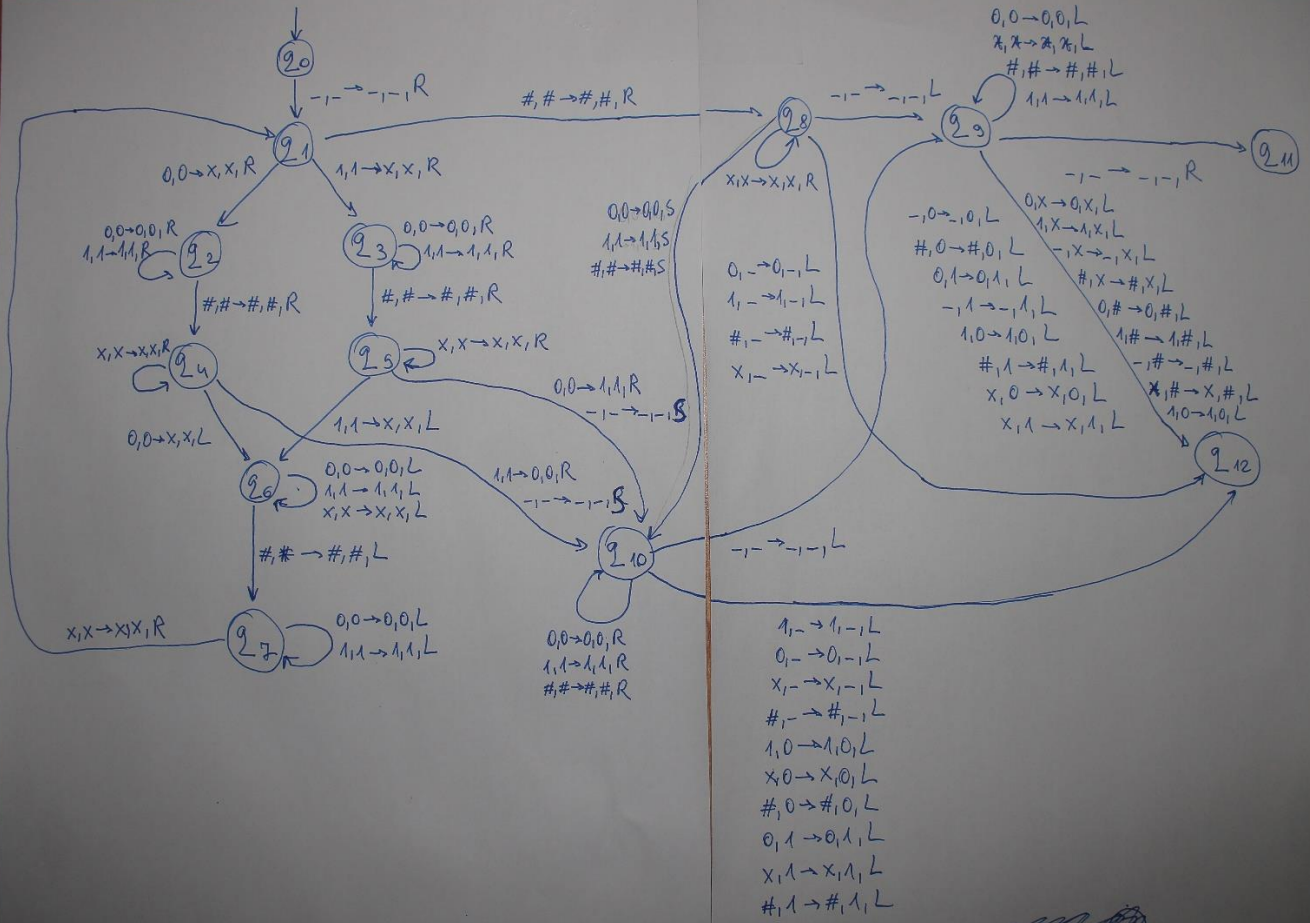
->daca starea finala == q11: inputul este acceptat si outputul necorupt

->daca starea finala == q12: inputul este acceptat si outputul corupt

->daca starea finala == q14: inputul este refuzat si outputul necorupt

->daca starea finala == q15: inputul este refuzat si outputul corupt

# STATE DIAGRAM PENTRU CONFIG\_FILE\_4\_1



The diagram illustrates the state transitions for a Turing machine, organized into two pages. The states are labeled  $q_0$  through  $q_{14}$ .

**Page 1 Transitions:**

- $q_0$  (Start):  $0, 0 \rightarrow 0, 0, R$ ;  $1, 1 \rightarrow 1, 1, R$ ;  $\#, \# \rightarrow \#, \#, R$
- $q_1$ :  $0, 0 \rightarrow 0, 0, R$ ;  $1, 1 \rightarrow 1, 1, R$ ;  $\#, \# \rightarrow \#, \#, R$
- $q_2$ :  $0, 0 \rightarrow 0, 0, R$ ;  $1, 1 \rightarrow 1, 1, R$ ;  $\#, \# \rightarrow \#, \#, R$
- $q_3$ :  $0, 0 \rightarrow 0, 0, R$ ;  $1, 1 \rightarrow 1, 1, R$ ;  $\#, \# \rightarrow \#, \#, R$
- $q_4$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_5$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_6$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_7$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_8$ :  $0, 0 \rightarrow 0, 0, S$ ;  $1, 1 \rightarrow 1, 1, S$ ;  $\#, \# \rightarrow \#, \#, S$
- $q_9$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_{10}$ :  $0, 0 \rightarrow 0, 0, R$ ;  $1, 1 \rightarrow 1, 1, R$ ;  $\#, \# \rightarrow \#, \#, R$

**Page 2 Transitions:**

- $q_{11}$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_{12}$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_{13}$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_{14}$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$
- $q_{15}$ :  $0, 0 \rightarrow 0, 0, L$ ;  $1, 1 \rightarrow 1, 1, L$ ;  $\#, \# \rightarrow \#, \#, L$