

function D-RECOGNIZE(*tape, machine*) **returns** accept or reject

index \leftarrow Beginning of tape

current-state \leftarrow Initial state of machine

loop

if End of input has been reached **then**

if *current-state* is an accept state **then**

return accept

else

return reject

elsif *transition-table*[*current-state, tape*[*index*]] is empty **then**

return reject

else

current-state \leftarrow *transition-table*[*current-state, tape*[*index*]]

index \leftarrow *index* + 1

end