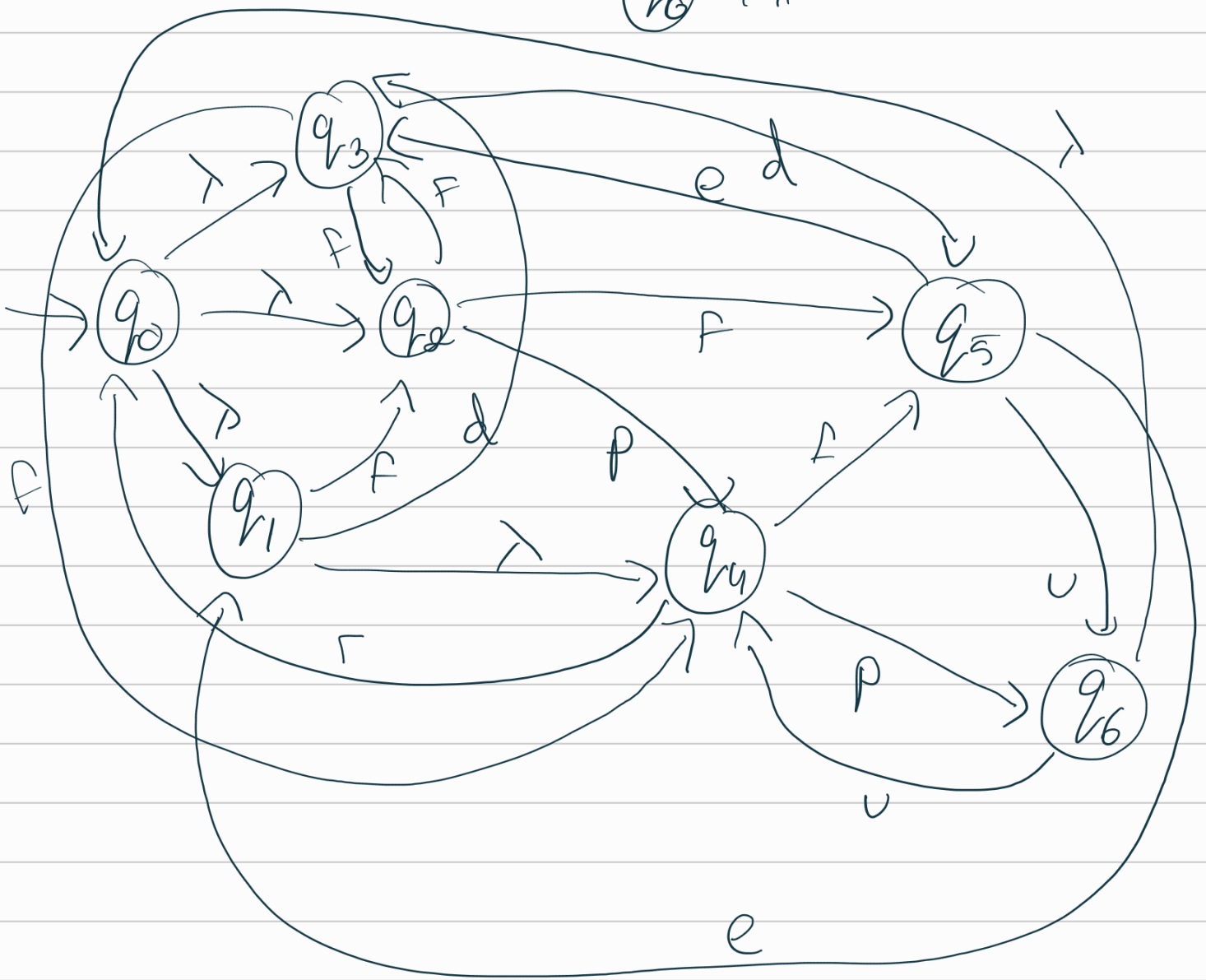


$\lambda$ -NFA      core      modelarea      phaseul      unu  
 robot      intr-o      fabrica      / cu      depozit

$\rightarrow$  f(ollow) path  
 $\rightarrow$  d(etect) obstacle  
 $\rightarrow$  p(ick) object  
 $\rightarrow$  r(eturn) to dock  
 $\rightarrow$  v(alidate) object  
 $\rightarrow$  e(rror)

$\rightarrow q_0$  : dock  
 $q_1$  : hall A  
 $q_2$  : hall B  
 $q_3$  : hall C  
 $q_4$  : packing zone  
 $q_5$  : CP  
 $q_6$  : Finalize task



|                | f                  | d              | p               | r                | v                 | e               |
|----------------|--------------------|----------------|-----------------|------------------|-------------------|-----------------|
| q <sub>0</sub> | q <sub>12345</sub> | q <sub>5</sub> | q <sub>4</sub>  | q <sub>φ</sub>   | q <sub>φ</sub>    | q <sub>φ</sub>  |
| q <sub>1</sub> | q <sub>25</sub>    | q <sub>3</sub> | q <sub>6</sub>  | q <sub>0</sub>   | q <sub>2</sub>    | q <sub>2</sub>  |
| q <sub>2</sub> | q <sub>35</sub>    | q <sub>2</sub> | q <sub>4</sub>  | q <sub>2</sub>   | q <sub>2</sub>    | q <sub>2</sub>  |
| q <sub>3</sub> | q <sub>24</sub>    | q <sub>5</sub> | q <sub>2</sub>  | q <sub>φ</sub>   | q <sub>φ</sub>    | q <sub>φ</sub>  |
| q <sub>4</sub> | q <sub>5</sub>     | q <sub>φ</sub> | q <sub>06</sub> | q <sub>023</sub> | q <sub>φ</sub>    | q <sub>φ</sub>  |
| q <sub>5</sub> | q <sub>φ</sub>     | q <sub>φ</sub> | q <sub>φ</sub>  | q <sub>φ</sub>   | q <sub>0236</sub> | q <sub>13</sub> |
| q <sub>6</sub> | q <sub>1235</sub>  | q <sub>5</sub> | q <sub>4</sub>  | q <sub>φ</sub>   | q <sub>4</sub>    | q <sub>φ</sub>  |
| /              | /                  | /              | /               | /                | /                 | /               |

|                    |                    |                 |                  |                  |                   |                 |
|--------------------|--------------------|-----------------|------------------|------------------|-------------------|-----------------|
| q <sub>12345</sub> | q <sub>2345</sub>  | q <sub>35</sub> | q <sub>046</sub> | q <sub>023</sub> | q <sub>0236</sub> | q <sub>13</sub> |
| q <sub>25</sub>    | q <sub>35</sub>    |                 | q <sub>4</sub>   |                  | q <sub>0236</sub> | q <sub>13</sub> |
| q <sub>35</sub>    | q <sub>24</sub>    | q <sub>5</sub>  |                  |                  | q <sub>0236</sub> | q <sub>13</sub> |
| q <sub>24</sub>    | q <sub>35</sub>    |                 | q <sub>046</sub> | q <sub>023</sub> |                   |                 |
| q <sub>06</sub>    | q <sub>12345</sub> | q <sub>5</sub>  | q <sub>4</sub>   |                  | q <sub>4</sub>    |                 |
| q <sub>023</sub>   | q <sub>12345</sub> | q <sub>5</sub>  | q <sub>4</sub>   |                  |                   |                 |
| q <sub>0236</sub>  | q <sub>12345</sub> | q <sub>5</sub>  | q <sub>4</sub>   |                  | q <sub>4</sub>    |                 |
| q <sub>13</sub>    | q <sub>245</sub>   | q <sub>35</sub> | q <sub>6</sub>   |                  |                   |                 |
| q <sub>245</sub>   | q <sub>35</sub>    |                 | q <sub>046</sub> |                  | q <sub>0236</sub> | q <sub>13</sub> |
| q <sub>046</sub>   | q <sub>12345</sub> | q <sub>5</sub>  | q <sub>046</sub> | q <sub>023</sub> | q <sub>4</sub>    |                 |
| q <sub>12345</sub> | q <sub>2345</sub>  | q <sub>5</sub>  | q <sub>046</sub> | q <sub>023</sub> | q <sub>0236</sub> | q <sub>13</sub> |

