

list of commands for the translation into spanish and italian:

| Svenska                                     | English                                  | Italian  | Spanish   |
|---|--|--|---|
| fram  | forward                                  | avanti   | adelante  |
| höger                                       | right                                    | destra   | derecha   |
| vänster                                     | left                                     | sinistra                                       | izquierda   |
| bak   | backward                                 | indietro ?                                     | ?   |
| upprepa() { }                               | repeat() { }                             | ripeti() { }                                   | repetir() { }                                     |
| hoppa                                       | jump                                     | salta  | salto   |
| def kvadrat =<br>upprepa(4)<br>{fram;höger} | def square =<br>repeat(4){forward;right} | def quadrato =<br>ripeti(4){avanti;<br>destra} | def cuadrado =<br>repetir(4){avanzar;<br>derecha} |
|   |  |  |   |

### Worksheet 1

Control your friend with the following sequence:

| Sequence 1   | Sequence 2  | Sequence 3<br>(Write your own<br>sequence and test) | Sequence 4<br>(Write your own<br>sequence and test) |
|--|---|---|---|
| forward<br>right<br>forward<br>left<br>forward<br>right<br>forward<br>left | back<br>right<br>forward<br>forward<br>right<br>backward<br>left<br>forward<br>forward<br>forward<br>left |   |   |

Guide your friend through the path

|       |  |  |  |  |  |  |  |  |      |
|-------|--|--|--|--|--|--|--|--|------|
|       |  |  |  |  |  |  |  |  | goal |
|       |  |  |  |  |  |  |  |  |      |
|       |  |  |  |  |  |  |  |  |      |
|       |  |  |  |  |  |  |  |  |      |
|       |  |  |  |  |  |  |  |  |      |
|       |  |  |  |  |  |  |  |  |      |
| start |  |  |  |  |  |  |  |  |      |



Guide your friend through the path (conclusion)

|         |
|---------|
| forward |
| forward |
| forward |
| forward |
| forward |
| right   |
| forward |
| forward |
| forward |
| right   |
| forward |
| left    |
| forward |
| forward |
| left    |
| forward |
| right   |
| forward |
| left    |
| forward |
| right   |
| forward |
| forward |
| forward |
|         |
|         |
|         |

**worksheet 2**

We move on the chessboard – chessboard on paper or a regular chessboard with chess piece tower

task 1: write a sequence that moves the tower

a) from A2 till H8

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

b) from D3 till B8

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

c) from H7 till C1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Task 2: student 1 moves the tower from B3 to E 8 in any way. Student 2 writes down the sequence , got it right? Switch places.

task 3: on which square does the tower end up?

a) Start box C4:

forward, forward, left, forward, forward, left, backward, forward , forward      goal box: (      )

b) Start box E5:

left, forward, right, forward, forward, left, backward, backward      goal box: (      )

c) Start box C4:

forward, forward, right, forward, forward, left, forward, forward      goal box: (      )

task 1: write a sequence that moves the tower

a) from A2 to H8 ( one possible solution:)

|             |             |             |             |             |             |       |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | right | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d |
|-------------|-------------|-------------|-------------|-------------|-------------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|

b) from D3 to B8( one possible solution:)

|             |             |             |             |             |      |                 |             |  |  |  |  |  |  |
|-------------|-------------|-------------|-------------|-------------|------|-----------------|-------------|--|--|--|--|--|--|
| forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | left | for<br>war<br>d | forwar<br>d |  |  |  |  |  |  |
|-------------|-------------|-------------|-------------|-------------|------|-----------------|-------------|--|--|--|--|--|--|

c) from H7 to C1( one possible solution:)

|              |              |              |              |              |              |      |             |             |             |             |             |  |  |
|--------------|--------------|--------------|--------------|--------------|--------------|------|-------------|-------------|-------------|-------------|-------------|--|--|
| back<br>ward | back<br>ward | back<br>ward | back<br>ward | back<br>ward | back<br>ward | left | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d | forwar<br>d |  |  |
|--------------|--------------|--------------|--------------|--------------|--------------|------|-------------|-------------|-------------|-------------|-------------|--|--|

Task 2:

student 1 moves the tower from B3 to E 8 in any way. Student 2 writes down the sequence. Got it right?

task 3: on which square does the tower end up?

a) Start box C4:

forward, forward, left, forward, forward, left, back, forward , forward      goal box: ( A5 )

b) Start box E5:

left, forward, right, forward, forward, left, backward, backward      goal box: ( F7 )

c) Start box C4:

forward, forward, right, forward, forward, left, forward, forward      goal box: ( E8 )