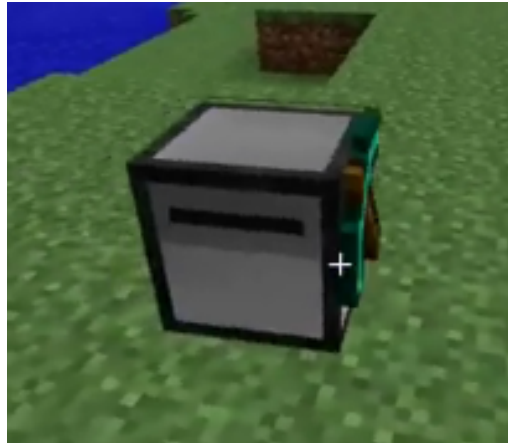


These videos will help us while we work!

## Programming Tutorial Episode 1



<https://www.youtube.com/watch?v=DSsx4VSe-Uk>

The Directory  
will list  
available  
Methods

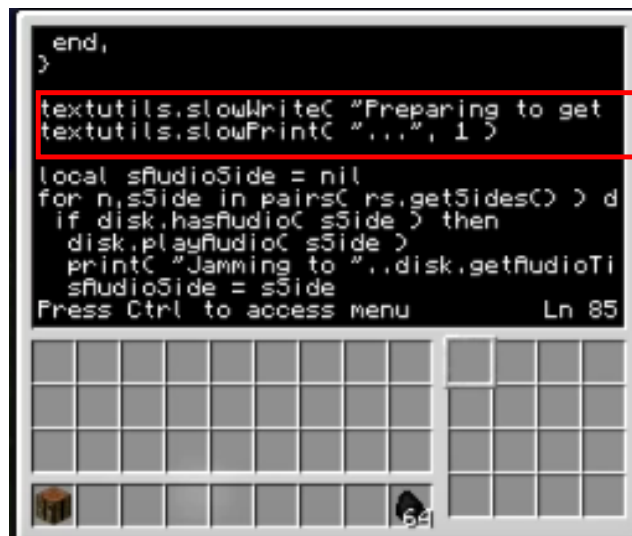
```
alias      apis      od      clear
copy      delete    dj      drive
edit      eject     exit    gps
help      id        label   list
lua       mkdir     monitor move
programs  reboot    redprobe redpulse
redset    rename    shell  shutdown
time      type

rom/programs> cd turtle
rom/programs/turtle> dir
craft      dance      excavate go
refuel     tunnel     turn
rom/programs/turtle> edit dance
```

```
local tMoves = {
function()
  turtle.up()
  turtle.down()
end,
function()
  turtle.up()
  turtle.turnLeft()
  turtle.turnLeft()
  turtle.turnLeft()
  turtle.turnLeft()
  turtle.turnLeft()
}
Press Ctrl to access menu Ln 1
```

Typing "edit" and  
then the name of  
a method will let  
you see the code  
inside

The turtle can write a message!



```
end,  
>  
textutils.slowWriteC "Preparing to get"  
textutils.slowPrintC "...", 1 )  
local sAudioSide = nil  
for n,sSide in pairs( rs.getSides() ) do  
  if disk.hasAudioC sSide then  
    disk.playAudioC sSide  
    printC "Jamming to "..disk.getAudioTi  
    sAudioSide = sSide  
Press Ctrl to access menu          Ln 85
```


```
rom/programs/turtle> dance
Preparing to get down...
Press any key to stop the groove
rom/programs/turtle> cd ..
rom/programs> cd .
rom/programs> cd ..
rom> cd ..
> lua
Interactive Lua prompt.
Call exit() to exit.
lua> _
```

We ran  
"dance"

We got out  
of the ROM  
folder and  
into the LUA  
interpreter

Turtles need fuel to move & operate

```
nom> cd ..  
> lua  
Interactive Lua prompt.  
Call exit() to exit.  
lua> turtle.turnRight()  
true  
lua> turtle.turnLeft()  
true  
lua> turtle.forward()  
false  
lua> turtle.getItemCount(1)  
0  
lua>
```



Can't go forward anymore!

Because it has no fuel left in it's first inventory slot!

★ `turtle.refuel()`

Built- in LUA methods

```
turtle.getItemCount()
```

```
turtle.getFuelLevel()
```

```
turtle.refuel()
```

```
print(" ")
```

```
textutils.slowWrite (" ")
```

```
textutils.slowPrint (" ")
```

```
turtle.forward()
```

```
turtle.up()
```

```
turtle.turnRight()
```

```
turtle.turnLeft()
```

```
turtle.select()
```

```
turtle.placeDown()
```

```
turtle.detect()
```

```
turtle.attack()
```

Built- in functions

\*outside of LUA interpreter\*





# You Try!

Make your own dance program  
by typing "edit dance2"

Write some code using the  
turtle.\_\_\_\_\_ prompts to make  
your dance unique!

Change the messages the turtle  
sends to the command prompt!