

Forum:[Hack Forums](#)

Thread: [Rotating 3D cube pure batch](#)

?CARUs L?VE?™ - May 10, 2018, 4:35 pm

Code @echo off & setlocal enableDelayedExpansion

if /i "%controller%" equ "enabled" if "%~1" neq "" goto :%~1

REM INITIALIZE -----

call :macros

mode 100,100

set "controller=enabled"

set "controls=WSADZX"

REM CHANGE ME

2>nul set /a "sides=%~1" || set /a "sides=4"

REM -----

set /a "size=18"

set /a "x=50", "y=50"

set /a "angle=360 / sides"

set /a "rotationSpeed=10"

set /a "depth=10"

set /a "P_ANGLE=0"

rem Û

REM -----

if /i "%controller%" equ "enabled" (

if exist "%temp%\%~n0_signal.txt" del "%temp%\%~n0_signal.txt"

"%~F0" Controller %controls% >"%temp%\%~n0_signal.txt" | "%~F0" GAME_ENGINE

<"%temp%\%~n0_signal.txt"

)

:GAME_ENGINE

for /l %%# in () do (set /a "frame+=1"

rem User Controller

if /i "%controller%" equ "enabled" set "com=" & set /p "com="

if /i "!com!" equ "D" (set /a "rotationSpeed+=5"

) else if /i "!com!" equ "A" (set /a "rotationSpeed-=5"

) else if /i "!com!" equ "W" (if !depth! lss 25 set /a "depth+=2", "x-=1", "y-=1"

) else if /i "!com!" equ "S" (if !depth! gtr 5 set /a "depth-=2", "x+=1", "y+=1"

) else if /i "!com!" equ "Z" (if !size! gtr 10 set /a "size-=3"

) else if /i "!com!" equ "X" if !size! lss 24 set /a "size+=3"

```
set /a "angle0+=rotationSpeed"
```

```
for %%i in (1 2) do ( for /l %%c in (1,1,%%sides%) do (
    set /a "b=%%c - 1" & for %%b in (!b!) do set /a "angle%%c=!angle%%b! + angle"
    set /a "xoff=x", "yoff=y"
    if %%i equ 1 (
        set /a "x%%i_%%c=size * !cos(x):x=angle%%c! + xoff"
        set /a "y%%i_%%c=size * !sin(x):x=angle%%c! + yoff"
    ) else (
        set /a "x%%i_%%c=size * !cos(x):x=angle%%c! + (xoff + depth)"
        set /a "y%%i_%%c=size * !sin(x):x=angle%%c! + (yoff + depth)"
    )
)
)
set /a "c=sides + 1" & set /a "x%%i_!c!=x%%i_1", "y%%i_!c!=y%%i_1"
)
```

```
for %%i in (1 2) do for /l %%c in (1,1,%%sides%) do (
    set /a "d=%%c + 1"
    for %%b in (!d!) do (
        %line% !x%%i_%%c! !y%%i_%%c! !x%%i_%%b! !y%%i_%%b! %%c
        set /a "connect_%%i_%%b_X=!x%%i_%%c!"
        set /a "connect_%%i_%%b_Y=!y%%i_%%c!"
    )
)
```

```
for /l %%c in (1,1,%%sides%) do ( set /a "d=%%c + 1"
    for %%b in (!d!) do (
        %line% !connect_1_%%b_X! !connect_1_%%b_Y! !connect_2_%%b_X!
!connect_2_%%b_Y! %%c
    )
)
```

rem display everything using VT100 2J sequence to clear the screen first.

```
set "stats1=%esc%[9;5HA - Decrease rotation speed    Z - Zoom out    W - Increase Depth"
set "stats2=%esc%[11;5HD - Increase rotation speed    X - Zoom in    S - Decrease depth"
set "stats3=%esc%[13;5H Rotation Speed = !rotationSpeed!%esc%[14;5H Zoom - !size!"
set "stats4=%esc%[5;5HSides = !sides!; Point at every !angle! Degrees; Depth = !depth!"
set "statsBuffer=!stats1!!stats2!!stats3!!stats4!"
<nul set /p "=%esc%[2J!screen!!statsBuffer!"
set "screen="
```

```
)
exit
```

:Controller

```
if /i "%controller%" equ "enabled" (
    for /l %%# in () do for /f "tokens=*" %%a in ('choice /c:%~2 /n') do <nul set /p " .=%%a"
)
```

```
:macros
set ^"LF=^
```

```
^" Above empty line is required - do not remove
set ^"n=^^^%LF%%LF%^%LF%%LF%^"
for /F %%a in ('echo prompt $E^| cmd') do set "ESC=%%a"
<nul set /p "=!esc![?25l"
```

```
rem %plot% x y 0-255 CHAR
set plot=for %%# in (1 2) do if %%#==2 ( for /f "tokens=1-4" %%1 in ("^!args^!") do (%\n%
    set "screen=^!screen^!!esc![%%2;%%1H!esc![38;5;%%3m%%~4!esc![0m"%\n%
)) else set args=
```

```
rem line x1 y1 x2 y2 color
set line=for %%# in (1 2) do if %%#==2 ( for /f "tokens=1-5" %%1 in ("^!args^!") do (%\n%
    if "%%~5" equ "" ( set "hue=30" ) else ( set "hue=%%~5" )%\n%
    set /a "xa=%%~1", "ya=%%~2", "xb=%%~3", "yb=%%~4", "dx=%%~3 - %%~1", "dy=%%~4 -
%%~2"%\n%
    for /f "tokens=1-2" %%6 in ("^!dx^! ^!dy^!") do (%\n%
        if %%~7 lss 0 ( set /a "dy=-%%~7", "stepy=-1" ) else ( set "stepy=1" )%\n%
        if %%~6 lss 0 ( set /a "dx=-%%~6", "stepx=-1" ) else ( set "stepx=1" )%\n%
        set /a "dx<=1", "dy<=1"%\n%
    )%\n%
    for /f "tokens=1-9" %%a in ("^!dx^! ^!dy^! ^!xa^! ^!xb^! ^!ya^! ^!yb^! ^!stepx^! ^!stepy^! ^!hue^!")
do (%\n%
    if %%~a gtr %%~b (%\n%
        set /a "fraction=%%~b - (%%~a >> 1)"%\n%
        for /l %%x in (%%~c,%%~g,%%~d) do (%\n%
            for /f "tokens=1" %%6 in ("^!fraction^!") do if %%~6 geq 0 set /a "ya+=%%~h",
"fraction-=%%~a"%\n%
            set /a "fraction+=%%~b"%\n%
            for /f "tokens=1" %%6 in ("^!ya^!") do (%\n%
                if 0 leq %%x if %%x lss 199 if 0 leq %%~6 if %%~6 lss 199 ^!plot^! %%x %%~6 %%i
Û%\n%
            )%\n%
        )%\n%
    ) else (%\n%
        set /a "fraction=%%~a - (%%~b >> 1)"%\n%
```

```

    for /l %%%y in (%%~e,%%~h,%%~f) do (%\n%
        for /f "tokens=1" %%%6 in ("^!fraction^!") do if %%%~6 geq 0 set /a "xa+=%%~g",
"fraction-=%%~b"\n%
        set /a "fraction+=%%~a"\n%
        for /f "tokens=1" %%%6 in ("^!xa^!") do (%\n%
            if 0 leq %%%~6 if %%%~6 lss 199 if 0 leq %%%y if %%%y lss 199 ^!plot^! %%%~6 %%%y %%%i
Û%\n%
        )%\n%
    )%\n%
    )%\n%
    )) else set args=

    set /a "PI=(35500000/113+5)/10, PI_div_2=(35500000/113/2+5)/10, PIx2=2*PI,
PI32=PI+PI_div_2"
    set
"_SIN=a-a*a/1920*a/312500+a*a/1920*a/15625*a/15625*a/2560000-a*a/1875*a/15360*a/15625*a/
15625*a/16000*a/44800000"
    set "SIN(x)=(a=(x * 31416 / 180)%%62832, c=(a>>31|1)*a,
a=((((c-47125)>>31)+1)*((a>>31|1)*62832) + (-((c-47125)>>31))*((
((c-15709)>>31)+1)*(-(a>>31|1)*31416+2*a) ), %_SIN%) / 10000"
    set "COS(x)=(a=(15708 - x * 31416 / 180)%%62832, c=(a>>31|1)*a,
a=((((c-47125)>>31)+1)*((a>>31|1)*62832) + (-((c-47125)>>31))*((
((c-15709)>>31)+1)*(-(a>>31|1)*31416+2*a) ), %_SIN%) / 10000"
    set "_SIN="
    set "Abs(x)=(((x)>>31|1)*(x))"
    goto :eof

```

Phlox - May 10, 2018, 4:50 pm

3D cube wow fantastic work mate!

What is wrong with gif you have posted shell i see if i can create a better gif for you?

pms - May 11, 2018, 8:54 pm

Was looking forward to see the results on this one and man, this is amazing.

Karakum - May 13, 2018, 10:33 am

Awesome! Now I'm your fan. We believe that this world is real!

Sir-Teabag - May 13, 2018, 6:29 pm

That's so cool dude! Keep up the great work

You should try to do an animation of a firework or something.. if you haven't already lol

?CARUs L?VE?™ - May 13, 2018, 6:34 pm

(May 13, 2018 06:29 PM)Sir-Teabag Wrote: [\[CITE\]](#) That's so cool dude! Keep up the great work

You should try to do an animation of a firework or something.. if you haven't already lol

Funny you should mention

<https://hackforums.net/showthread.php?tid=5826799>

Erhan - May 27, 2018, 11:59 pm

Another stunning batch script from you, thanks!!