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# Obj Friction (subroutine)

See also: Obj Halt (subroutine)

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## Purpose

The ObjFriction subroutine applies friction to the motion of an object.

## Syntax

Obj Draw *ObjectHandle*, *Friction*

*ObjectHandle* - the object created to apply friction to.  
*Friction* - the amount of friction to add in the range of 0 to 1.  
0 - all friction applied, unable to move.  
1 - no friction applied, free floating object.

## Usage

```
' *****  
' * ObjFriction Demonstration *  
' *****  
  
CONST FALSE = 0, TRUE = NOT FALSE ' Boolean truth detectors  
  
DIM ObjShip AS INTEGER ' ship object file pointer  
DIM Ship AS INTEGER ' ship object pointer  
DIM Friction AS INTEGER ' TRUE if friction enabled  
  
ObjInit ' initialize vector library  
ObjShip = ObjLoad("objship.obj") ' load ship object file  
UFO = ObjMake(ObjUFO) ' make ship object  
ObjPut Ship, 319, 239 ' place at center of screen  
ObjFriction Ship, .9 ' start with friction applied  
ObjBind Ship, 0, 0, 639, 479, OBJLOOP ' keep ship on screen  
Friction = TRUE ' friction enabled  
SCREEN _NEWIMAGE(640, 480, 32) ' create graphics screen  
DO ' begin demo loop  
  _LIMIT 60 ' 60 frames per second  
  CLS ' clear screen  
  PRINT ' print instructions  
  PRINT " LEFT/RIGHT arrow key to rotate"  
  PRINT " UP arrow key to move"  
  PRINT " ENTER to turn friction "  
  IF Friction THEN PRINT "OFF" ELSE PRINT "ON"  
  IF _KEYDOWN(19200) THEN ' LEFT ARROW pressed?  
    ObjRotate Ship, -5, OBJRELATIVE ' yes, rotate ship left  
  ELSEIF _KEYDOWN(19712) THEN ' no, RIGHT ARROW pressed?  
    ObjRotate Ship, 5, OBJRELATIVE ' yes, rotate ship right  
  END IF  
  IF _KEYDOWN(18432) THEN ' UP ARROW pressed?  
    ObjPush Ship, .25 ' yes, nudge ship forward  
  END IF  
  IF INKEYS = CHR$(13) THEN ' ENTER pressed?  
    Friction = NOT Friction ' yes, invert friction  
    IF Friction THEN ' friction on?  
      ObjFriction Ship, .9 ' yes, apply friction to ship  
    ELSE ' no, friction is off  
      ObjFriction Ship, 1 ' remove all friction from ship  
    END IF  
  END IF  
END DO
```

```
Obj Move Ship '
Obj Draw Ship '
_DISPLAY '
LOOP UNTIL _KEYDOWN(27) '
update ship location
draw the ship
show screen changes
Press ESC to leave
```

The code above demonstrates how to use ObjFriction to control the motion of an object.