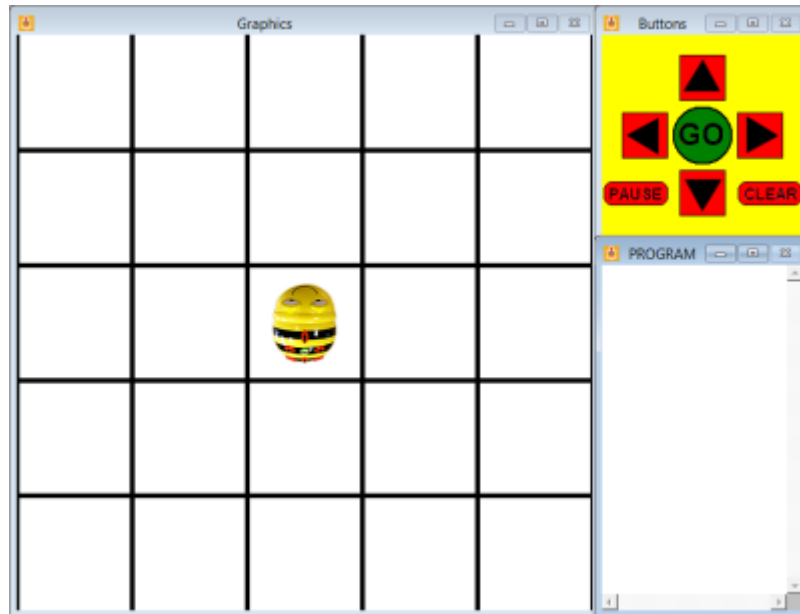


Bee-Bot Emulator

The Bee-Bot Emulator presents a Bee-Bot robot on a surface. To the right, the Bee-Bot controls offer you to create a small program. Just click the buttons as you would press the Bee-Bot's buttons. A third window lists all of the Bee-Bot commands that will be executed when you click the GO button.

The program demonstrates how to load shapes into turtles, and how to run small snippets of Logo code when a turtle is clicked.



```
TO LOAD.CONTROLS
```

```
  LOCAL "TEMPNAME
```

```
  MAKE "TEMPNAME LOADSNAP WORD :LOGODIR "|/toolbox/robots/bbgo.bmp|
```

```
  PPROP :TEMPNAME "NAME "BBGO
```

```
  PPROPS "BBGO [WINDOW BUTTONS POSITION [0 0]]
```

```
  MAKE "TEMPNAME LOADSNAP WORD :LOGODIR "|/toolbox/robots/bbforward.bmp|
```

```
  PPROP :TEMPNAME "NAME "BBFORWARD
```

```
  PPROPS "BBFORWARD [WINDOW BUTTONS POSITION [0 60]]
```

```
  MAKE "TEMPNAME LOADSNAP WORD :LOGODIR "|/toolbox/robots/bbback.bmp|
```

```
  PPROP :TEMPNAME "NAME "BBBACK
```

```
  PPROPS "BBBACK [WINDOW BUTTONS POSITION [0 -60]]
```

```
  MAKE "TEMPNAME LOADSNAP WORD :LOGODIR "|/toolbox/robots/bbright.bmp|
```

```
  PPROP :TEMPNAME "NAME "BBRIGHT
```

```
  PPROPS "BBRIGHT [WINDOW BUTTONS POSITION [60 0]]
```

```
  MAKE "TEMPNAME LOADSNAP WORD :LOGODIR "|/toolbox/robots/bbleft.bmp|
```

```
  PPROP :TEMPNAME "NAME "BBLEFT
```

```
  PPROPS "BBLEFT [WINDOW BUTTONS POSITION [-60 0]]
```

```
  MAKE "TEMPNAME LOADSNAP WORD LOGODIR "|/toolbox/robots/bbclear.bmp|
```

```
  PPROP :TEMPNAME "NAME "BBCLEAR
```

```
  PPROPS "BBCLEAR [WINDOW BUTTONS POSITION [70 -60]]
```

```
  MAKE "TEMPNAME LOADSNAP WORD :LOGODIR "|/toolbox/robots/bbpause.bmp|
```

```
  PPROP :TEMPNAME "NAME "BBPAUSE
```

```
  PPROPS "BBPAUSE [WINDOW BUTTONS POSITION [-70 -60]]
```

```

END

TO LOAD.BEEBOT
  LOCAL "TEMPNAME
  MAKE "TEMPNAME LOADSNAP WORD :LOGODIR "|/toolbox/robots/bee-bot.bmp|
  PPROPS :TEMPNAME [NAME |BEE-BOT| WINDOW GRAPHICS]
  TELL "|BEE-BOT|
  HOME
  setspeed .5
  MAKE "PROGRAM []
END

to enable.controls
  ; Attach the Logo snippets that run when clicked by setting the RUN property
  PPROP "BBGO "RUN [RUN :PROGRAM]
  pprop "bbforward "RUN [make "program se :PROGRAM [fd 125 WAIT 500] PRINT "FORWARD]
  pprop "bbback "run [make "program se :program [bk 125 WAIT 500] PRINT "BACK]
  pprop "bbright "run [make "program se :program [rt 90 WAIT 500]PRINT "RIGHT]
  pprop "bbleft "run [make "program se :program [lt 90 WAIT 500] PRINT "LEFT]
  pprop "bbpause "run [make "program se :program [wait 1000] PRINT "PAUSE]
  pprop "bbclear "run [make "program [] CT]

end

TO SETUP.ENVIRONMENT
  HT
  PPROPS "GRAPHICS [DRAWSIZE [600 600] POSITION [0 0]]
  DECLARE "GRAPHICS "BUTTONS
  PPROPS "BUTTONS [BGCOLOR [255 255 0] DRAWSIZE [210 210] POSITION [610 0]]
  PPROPS "LISTENER [TITLE PROGRAM DRAWSIZE [210 360] POSITION [610 240] ]
  CT
END

TO DRAWGRID
  IF (ALERT "|Would you like a grid for Bee-Bot to travel?| "YES "NO) = "NO THEN STOP
  ask 0 [ pu setxy [0 60] pd seth 90 setw 5 fd 2000]
  ask 0 [ pu setxy [0 180] pd seth 90 setw 5 fd 2000]
  ask 0 [ pu setxy [0 -60] pd seth 90 setw 5 fd 2000]
  ask 0 [ pu setxy [0 -180] pd seth 90 setw 5 fd 2000]
  ask 0 [ pu setxy [60 0] pd seth 180 setw 5 fd 2000]
  ask 0 [ pu setxy [180 0] pd seth 180 setw 5 fd 2000]
  ask 0 [ pu setxy [300 0] pd seth 180 setw 5 fd 2000]
  ask 0 [ pu setxy [-60 0] pd seth 180 setw 5 fd 2000]
  ask 0 [ pu setxy [-180 0] pd seth 180 setw 5 fd 2000]
  ask 0 [ pu setxy [-300 0] pd seth 180 setw 5 fd 2000]
END

TO BEEBOT
  SETUP.ENVIRONMENT LOAD.BEEBOT LOAD.CONTROLS ENABLE.CONTROLS DRAWGRID
END

BEEBOT

```

Procedure:

BEEBOT

Description:

Bee-Bot Emulator

Level:

Intermediate

Compatible:

Logo 3, Logo 4

Tags:

Properties, Turtle, Drawing, Bitmaps, Bee-Bot, Emulator