

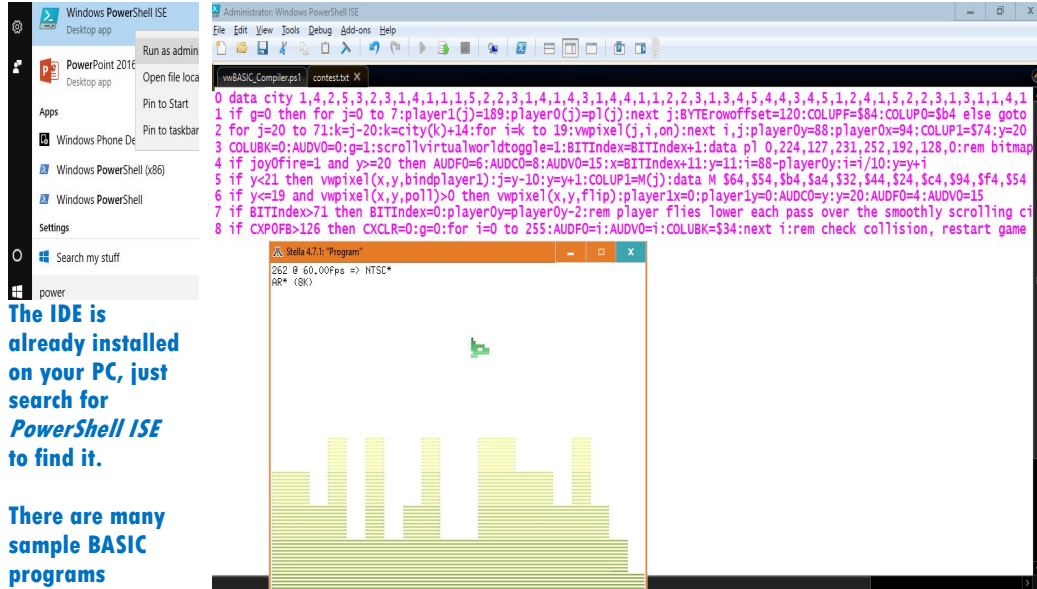
Atari 2600 BASIC Programming

Quick Start Guide

1. Copy the vwBASIC folder to c:\vwBASIC

Right click the IDE and run as Administrator:

Load the Compiler and a BASIC program in different tabs. Select the Compiler tab and click Play* to run the program:



The IDE is already installed on your PC, just search for PowerShell ISE to find it.

There are many sample BASIC programs included ranging from simple to complex, some will even show you how to program the Atari without writing any code!

This example is a Video Game in 9 lines of BASIC (9LineBlitz.txt) that competed in the 2016 Vintage BASIC Programming Contest, placing Atari 2600 BASIC Programming ahead of C-64, TRS-80, ZX-81 and Apple BASIC!

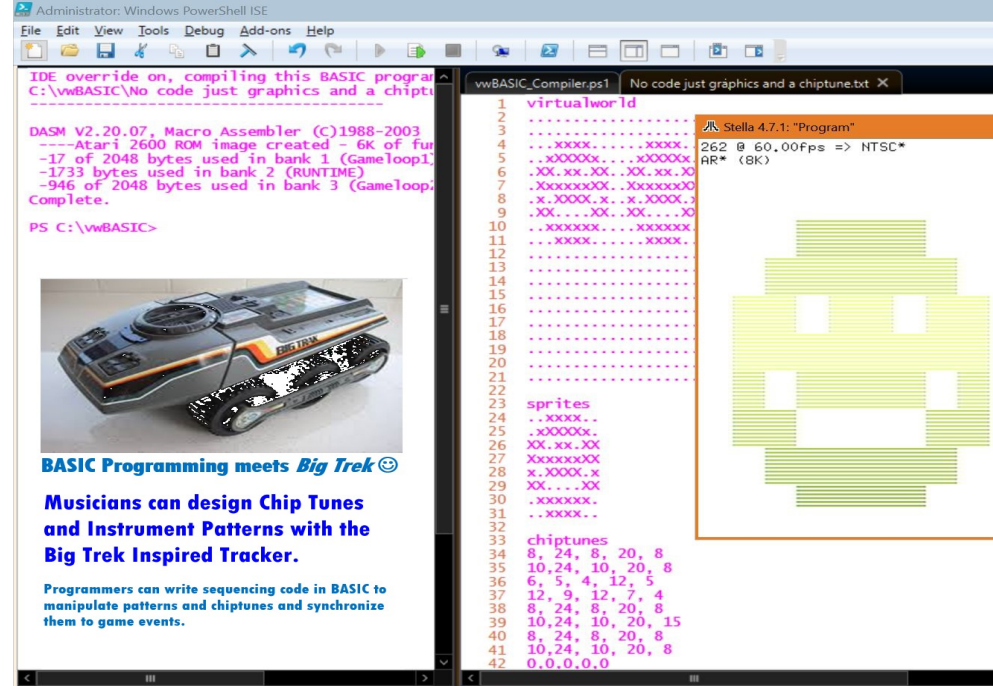
This guide contains fun examples to get you started immediately with Atari 2600 BASIC Programming!

*Configuration Notes: You must run the following command one time first to enable PowerShell:

set-executionpolicy -ExecutionPolicy RemoteSigned

Also place a copy of the Stella emulator (Stella.exe and its DLLs) in folder c:\vwBASIC\Stella This is only necessary to launch the emulator; the ROM image will still get created as c:\vwBASIC\program.bin

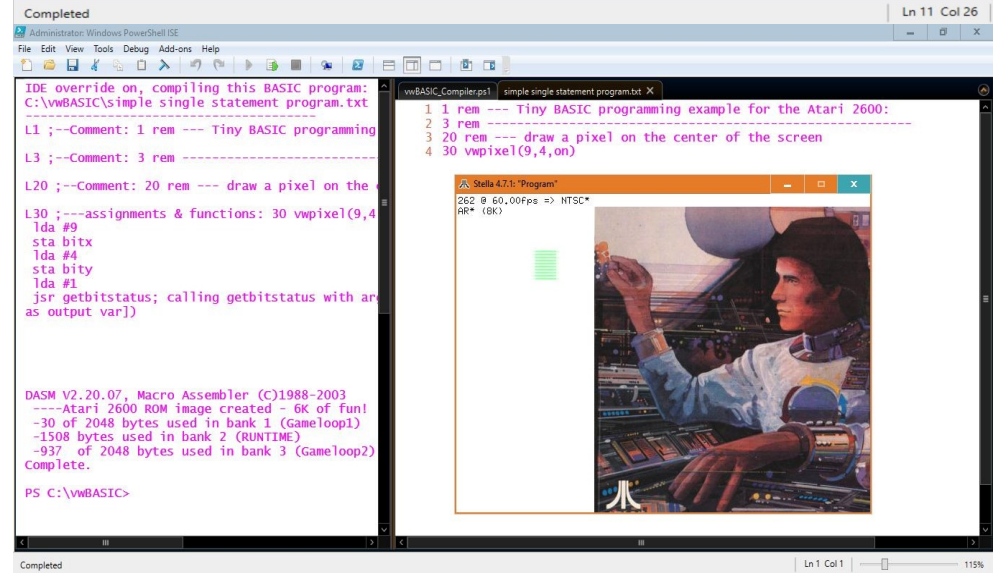
Program visually with ASCII art and Big Trek, or BASIC programs as simple as one command:



BASIC Programming meets Big Trek 😊

Musicians can design Chip Tunes and Instrument Patterns with the Big Trek Inspired Tracker.

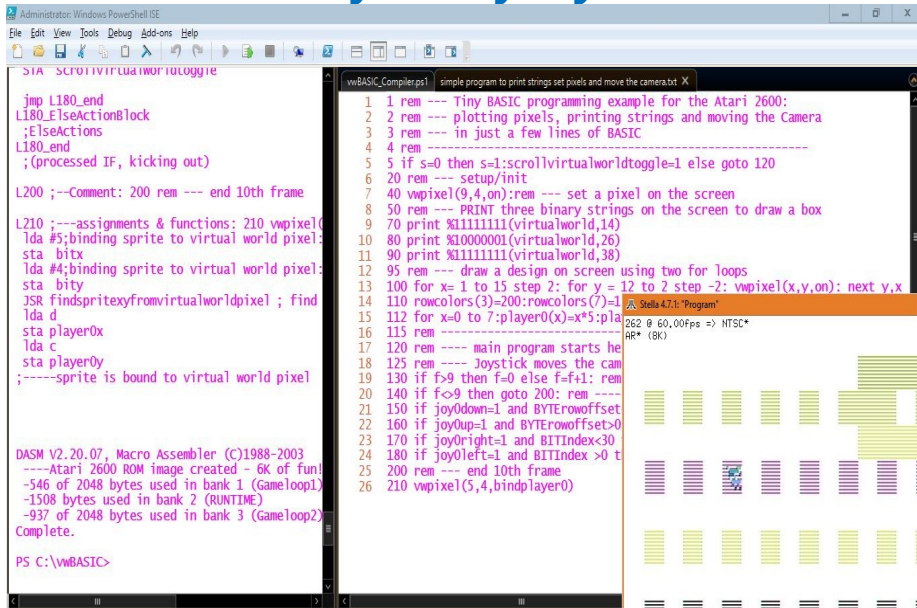
Programmers can write sequencing code in BASIC to manipulate patterns and chiptunes and synchronize them to game events.



Run 1000's of BASIC programs on your Atari!

Atari 2600 BASIC Programming turns your VCS into a true Video Computer System.

BASIC Programming on your Atari!



```
Administrator: Windows PowerShell ISE
File Edit View Tools Debug Add-ons Help
S:\A SCROLLVIRTUALWORLDTOGGLE
jmp L180_end
L180_ElseActionBlock
;ElseActions
L180_end
;(processed IF, kicking out)
L200 ;--Comment: 200 rem --- end 10th frame
L210 ;--assignments & functions: 210 vmpixel(
lda #5:binding sprite to virtual world pixel:
sta bitx
lda #4:binding sprite to virtual world pixel:
sta bity
JSR findsprixeyfromvirtualworldpixel; find
lda d
sta player0x
lda c
sta player0y
;----sprite is bound to virtual world pixel
DASM V2.20.07, Macro Assembler (C)1988-2003
----Atari 2600 ROM image created - 6K of fun!
-546 of 2048 bytes used in bank 1 (GameLoop1)
-1508 bytes used in bank 2 (RUNTIME)
-937 of 2048 bytes used in bank 3 (GameLoop2)
Complete.
PS C:\vbBASIC>
vwBASIC_Compiler.exe simple program to print strings set pixels and move the camera bit X
1 1 rem --- Tiny BASIC programming example for the Atari 2600:
2 2 rem --- plotting pixels, printing strings and moving the Camera
3 3 rem --- in just a few lines of BASIC
4 4 rem -----
5 5 if s=0 then s=1:scrollvirtualworldtoggle=1 else goto 120
6 20 rem --- setup/init
7 40 vmpixel(9,4,on):rem --- set a pixel on the screen
8 50 rem --- PRINT three binary strings on the screen to draw a box
9 70 print %11111111(virtualworld,14)
10 80 print %10000001(virtualworld,26)
11 90 print %11111111(virtualworld,38)
12 95 rem --- draw a design on screen using two for loops
13 100 for x= 1 to 15 step 2: for y = 12 to 2 step -2: vmpixel(x,y,on): next y,x
14 110 rowcolors(3)-200:rowcolors(7)-1
15 112 for x=0 to 7:player0(x)=x*5:pla
16 115 rem -----
17 120 rem --- main program starts here
18 125 rem --- Joystick moves the camera
19 130 if f>9 then f=0 else f=f+1: rem
20 140 if f<>9 then goto 200: rem ----
21 150 if joy0down=1 and BYTERowoffset
22 160 if joy0up=1 and BYTERowoffset>0
23 170 if joy0right=1 and BITIndex>30
24 180 if joy0left=1 and BITIndex >0 t
25 200 rem --- end 10th frame
26 210 vmpixel(5,4,bindplayer0)
Stella 4.7.1: "Program"
262 @ 60.00Fps => NTSC*
HR* (8K)
```

This sample program prints binary strings on the screen to create a bitmap image, plots some pixels, uses a for/next loop to plot a design, and lets you use the joystick to scroll the virtual world around.

It also binds a sprite to the virtual world and draws a pattern on the sprite and colors it.

Only a few lines of BASIC are used with comments explaining step by step.

Further Reading: As you experiment and have fun programming in BASIC, you may wish to read the reference manual: [vwBASIC_readme.txt](#)

Writing Video Games in BASIC:

It's fun and easy to create BASIC programs and Video Games for your Atari! This BASIC is fast and runs 60x per second on the Atari – [architecture.jpg](#) will give you a good overview to go along with the manual.

Putting your BASIC Programs on Cartridge, Tape and CD:

Your BASIC programs are compiled into binaries (Atari ROM's) which can be turned into .wav files to create Tapes and CD's for the Atari SuperCharger, or the binaries can be put on cartridges (you can order a cart with your program on it from [AtariAge.com](#)).

ATARI 2600

BASIC PROGRAMMING

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COMPLETE BASIC PROGRAMMING INSTRUCTIONS

WRITE AND DISPLAY PROGRAMS

SAMPLE PROGRAMS INCLUDED

IDE for Windows – Program Atari 2600

Video Games in BASIC

QUICK START GUIDE