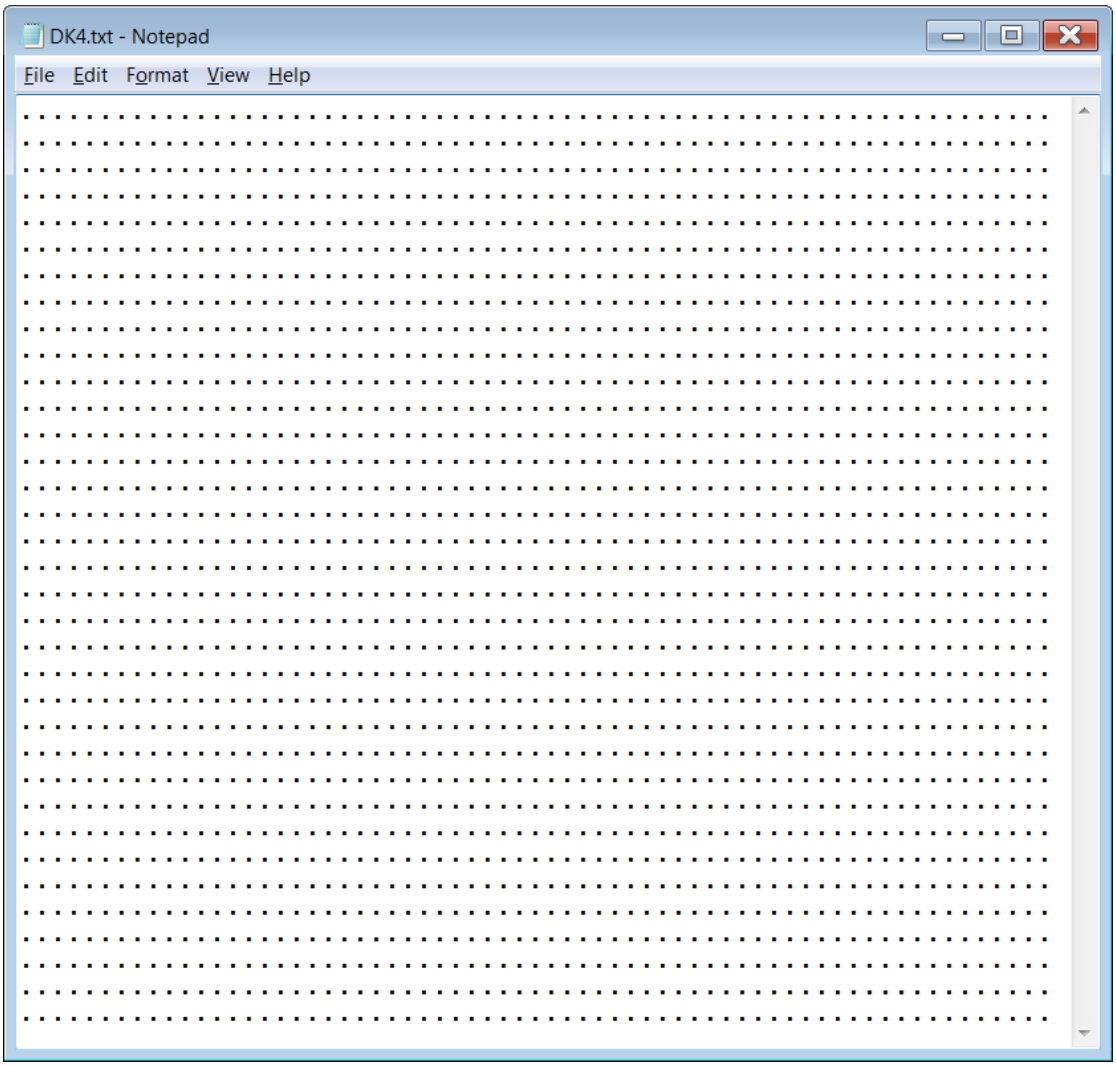
Computer Science 1	Lab 17B Open Ended *Text File* Assignment
Creating Graphics Backgrounds From Text Files	**80, 100 and 110 Point Versions**

Assignment Purpose:

Students will manipulate graphics background output by manipulating text files.

For this assignment, you are actually not writing a program at all. Not only is the program, **Lab17Bst.py**, already written, you have actually already seen it. **Lab17Bst.py** is identical to the last program example from Chapter 17, **TextFiles23.py**. This was the program that created graphics backgrounds from text files. You probably noticed that 3 of the backgrounds resemble those from Nintendo's classic *Donkey Kong* arcade game. Imagine that you are creating a new 40th Anniversary Edition of Donkey Kong that will feature a couple extra levels. Your mission is to design the backgrounds for those levels and to create the text files that will store them.

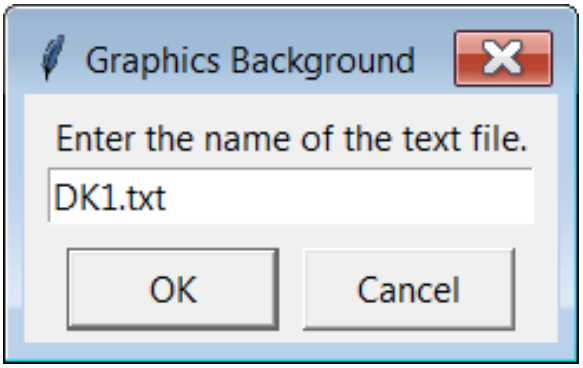
To begin, you should load the file **DK4.txt**, which is shown below:

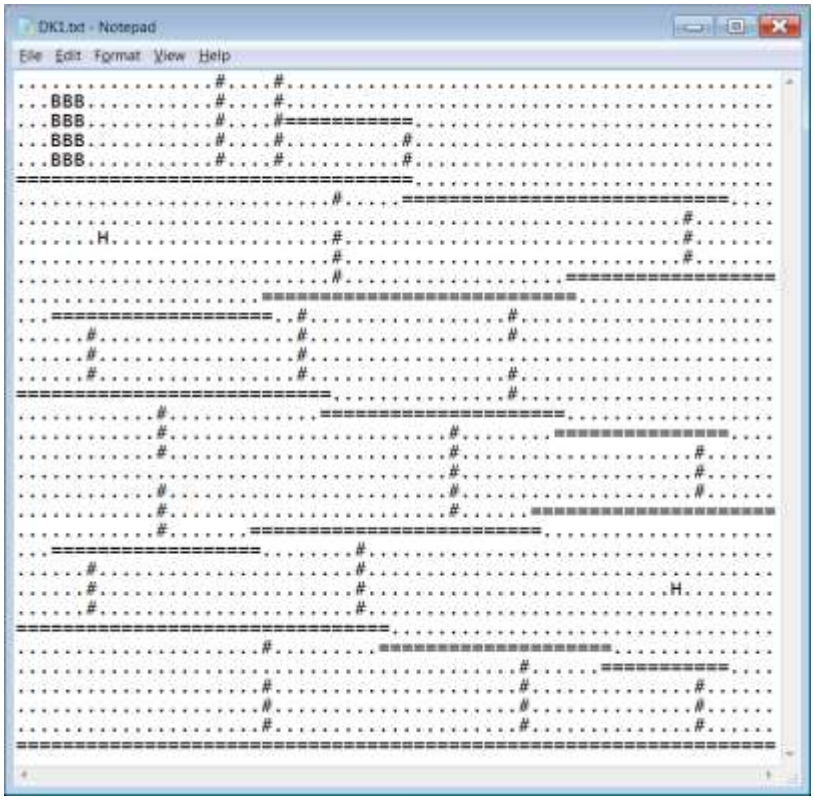


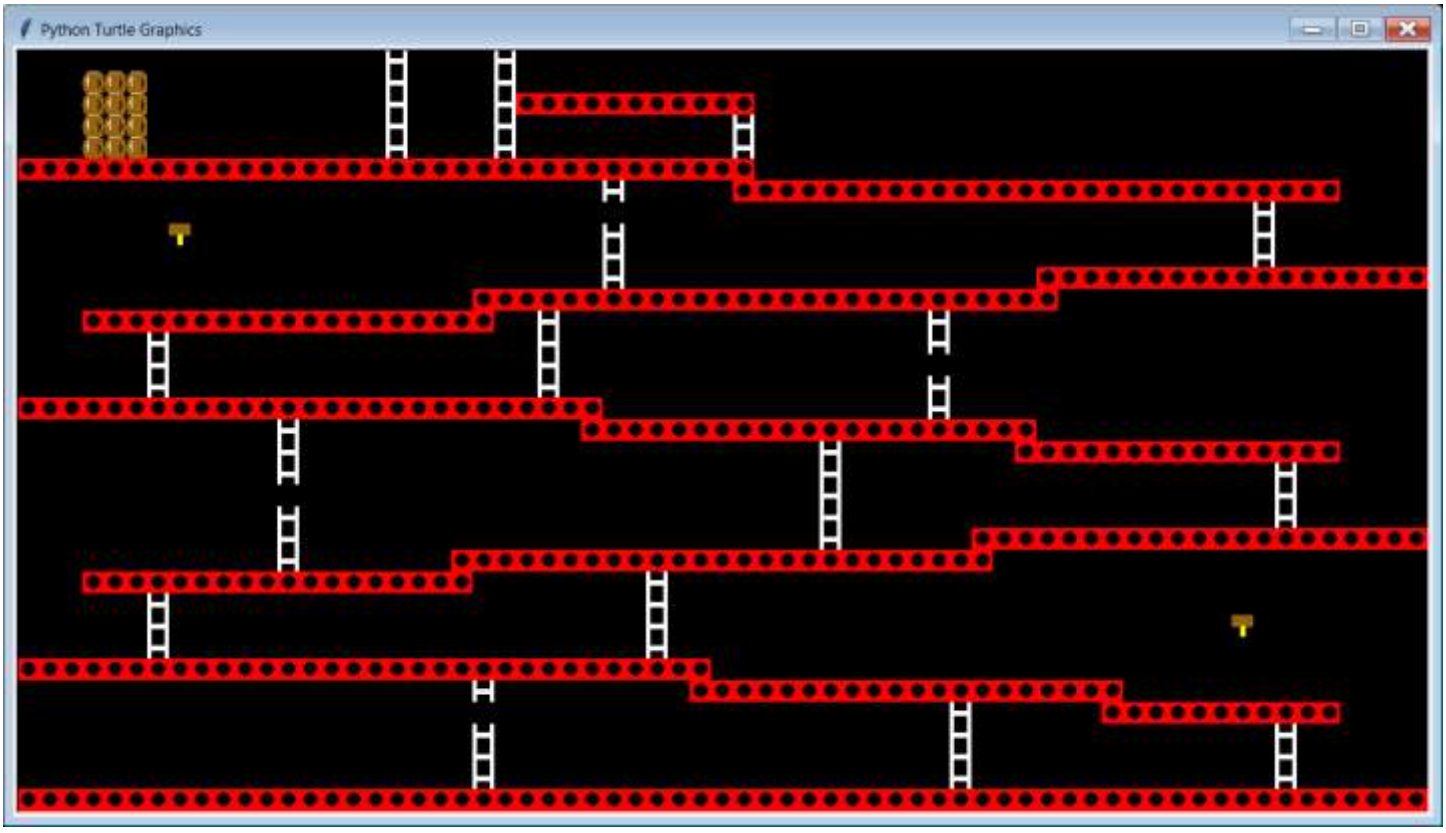
The **DK4.txt** and **DK5.txt** files contain 35 rows of 65 periods.

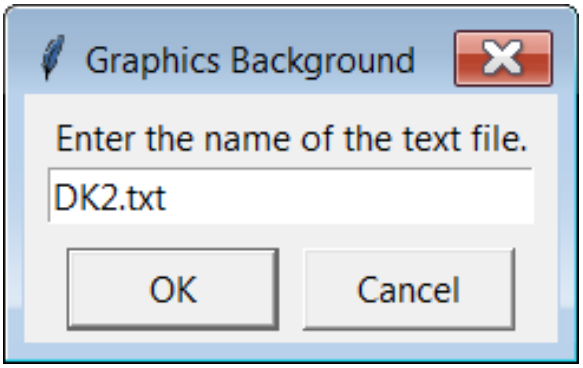
Use these files to design your new original *Donkey Kong* backgrounds.

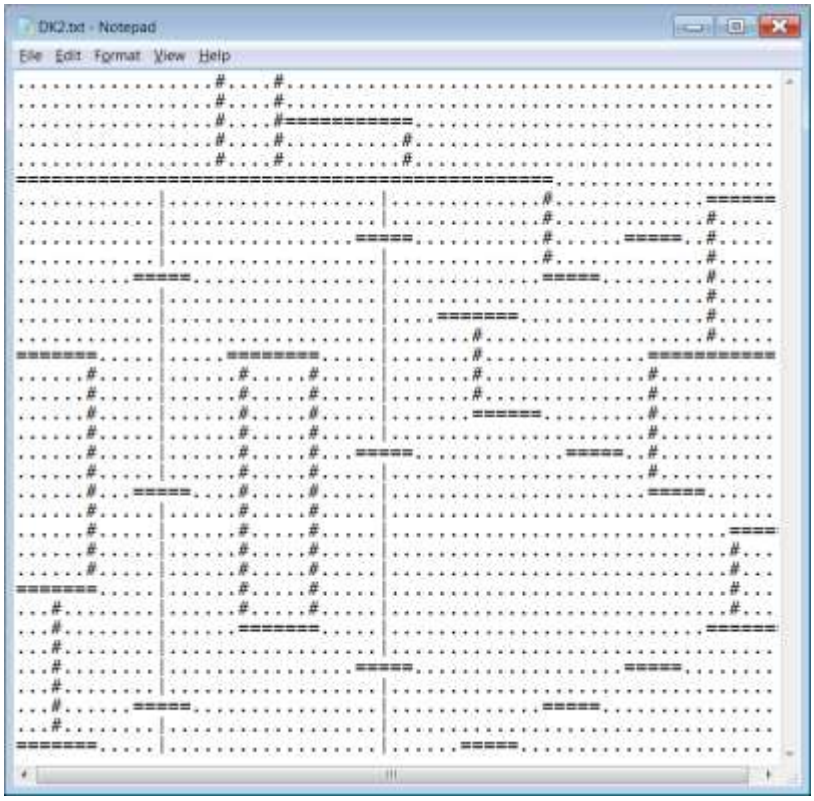
Examples of existing backgrounds are on the next few pages.

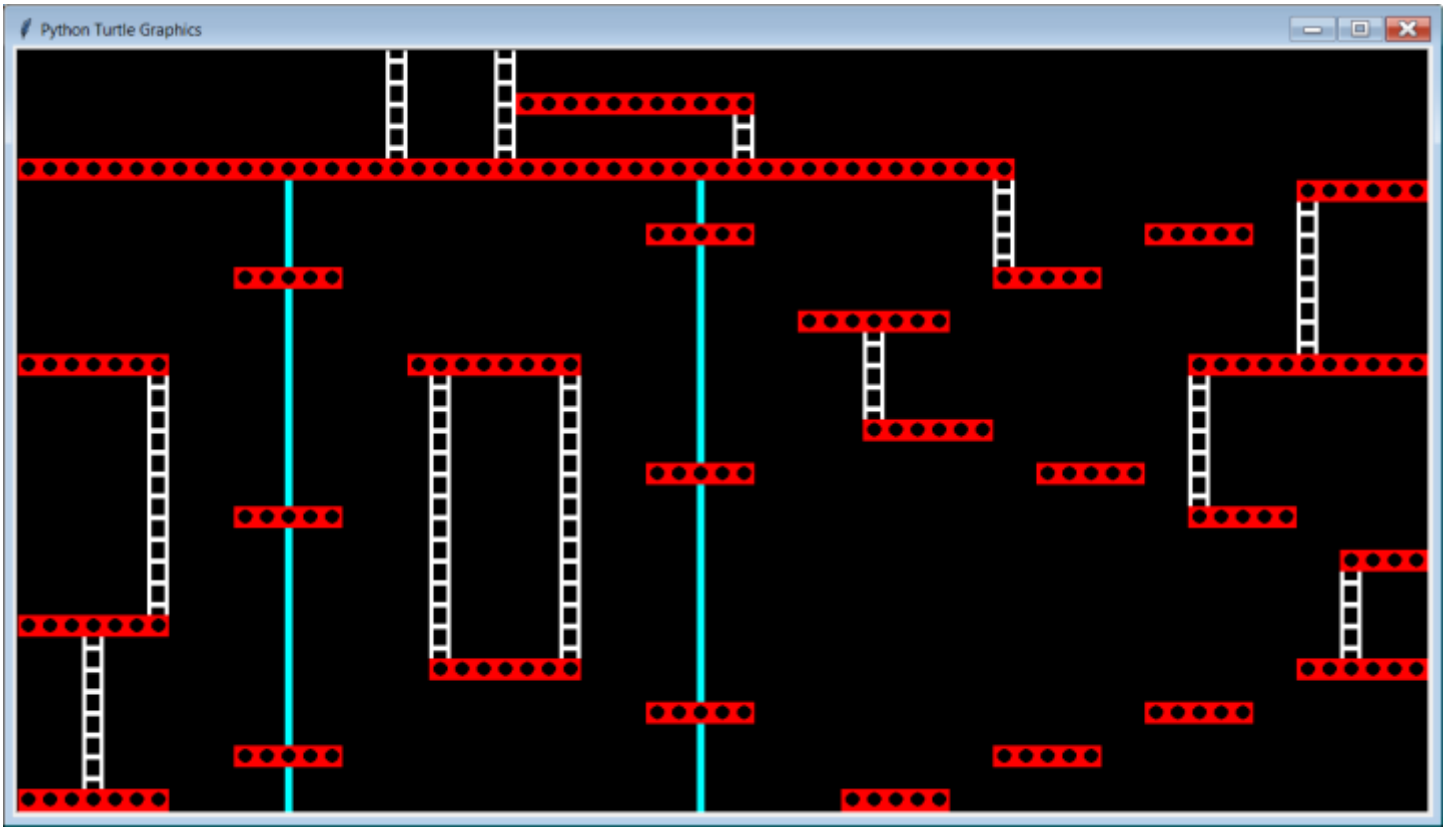

Graphics Background
Enter the name of the text file.
DK1.txt
OK
Cancel

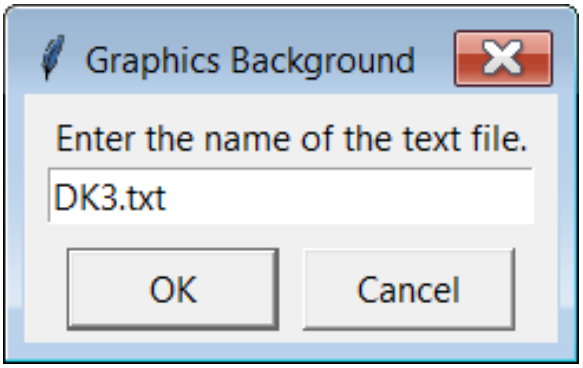

DK1.txt - Notepad
File Edit Format View Help

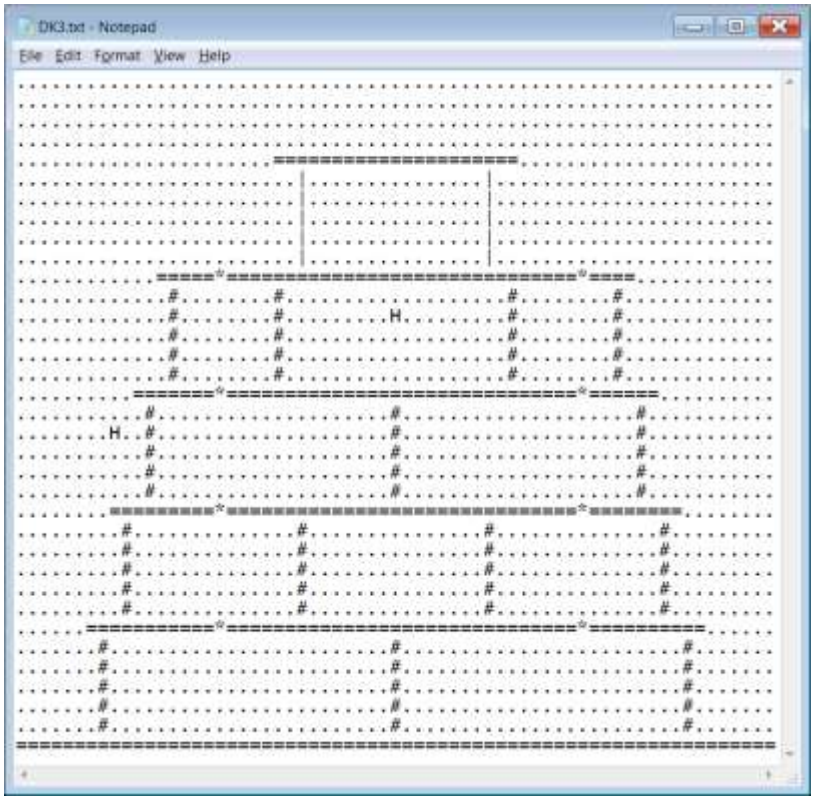

Python Turtle Graphics

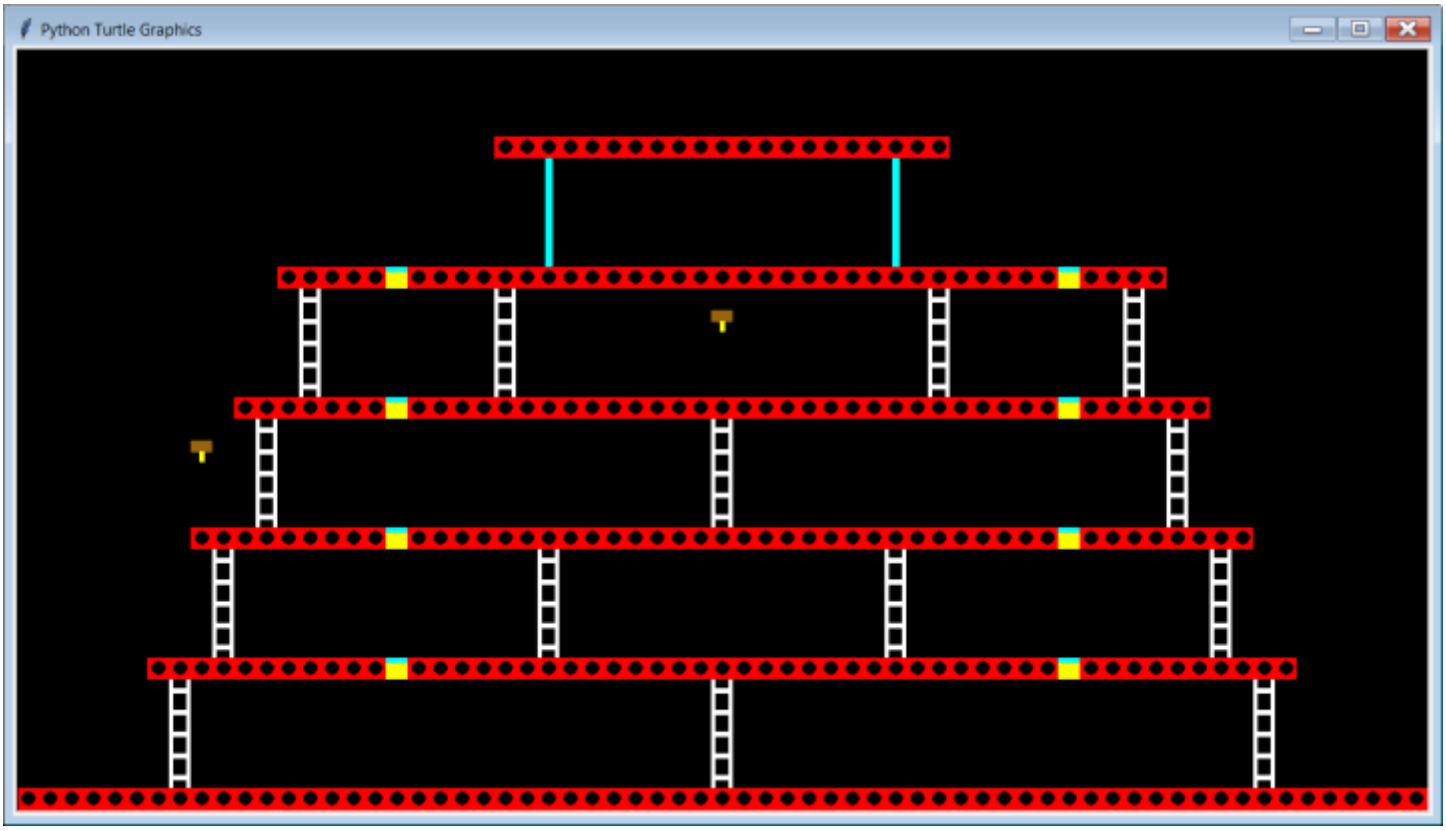

Graphics Background
Enter the name of the text file.
DK2.txt
OK
Cancel


DK2.txt - Notepad
File Edit Format View Help


Python Turtle Graphics


Graphics Background
Enter the name of the text file.
DK3.txt
OK
Cancel


DK3.txt - Notepad
File Edit Format View Help


Python Turtle Graphics

Keep in mind that when designing these levels, there must be a way for *Jumpman* (Mario's original name) to get from the bottom of the level to the top. The level can be challenging, but it must be completable and not just a bunch of random images. The level also should not just have a ladder that goes all of the way to the top. You want to make something that is interesting and would actually be fun to play.

80 Point Version

Use the file **DK4.txt** to design the background for your original *Donkey Kong* level. This level needs to incorporate at least 4 of the 6 provided images (girders, ladders, hammers, barrels, locks and poles).

100 Point Version

After you finish the 80 point version, repeat the process with the file **DK5.txt**. When finished, you will have 2 original *Donkey Kong* levels. Between these 2 levels, you need to incorporate at least 5 of the 6 provided images (girders, ladders, hammers, barrels, locks and poles).

110 Point Version

First, do everything required for the 100-point version and have your teacher grade it.

Then you need to add a new procedure to the **Lab17Bst.py** file. This will be something like **drawGirder** or **drawLadder**, but it will display a new, original image of your own design. It cannot simply draw a solid square, nor can it simply be a copy of one of the provided images. It needs to be something original that makes sense in the game *Donkey Kong*. You then need to incorporate this new image in a logical way in at least 1 of your 2 background text files.