

[HTML](#)[CSS](#)[MORE ▾](#)

Python Variables

[< Previous](#)[Next >](#)

Creating Variables

Unlike other programming languages, Python has no command for declaring a variable.

A variable is created the moment you first assign a value to it.

Example

```
x = 5
y = "John"
print(x)
print(y)
```

[Run example »](#)

Variables do not need to be declared with any particular type and can even change type after they have been set.

Example

```
x = 4 # x is of type int
x = "Sally" # x is now of type str
print(x)
```

[Run example »](#)

Variable Names

A variable can have a short name (like x and y) or a more descriptive name (age, carname, total_volume). Rules for Python variables:

- A variable name must start with a letter or the underscore character
- A variable name cannot start with a number
- A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)
- Variable names are case-sensitive (age, Age and AGE are three different variables)

Remember that variables are case-sensitive

Output Variables

The Python `print` statement is often used to output variables.

To combine both text and a variable, Python uses the `+` character:

Example

```
x = "awesome"
print("Python is " + x)
```

[Run example »](#)

You can also use the `+` character to add a variable to another variable:

Example

```
x = "Python is "  
y = "awesome"  
z = x + y  
print(z)
```

[Run example »](#)

For numbers, the `+` character works as a mathematical operator:

Example

```
x = 5  
y = 10  
print(x + y)
```

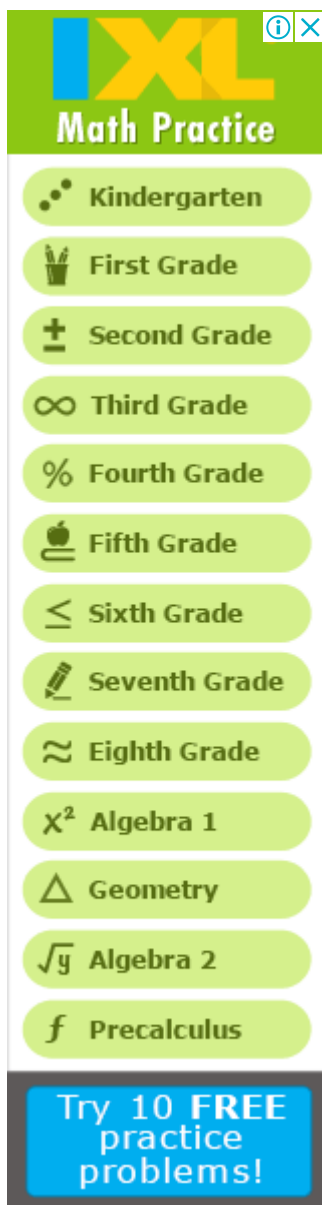
[Run example »](#)

If you try to combine a string and a number, Python will give you an error:

Example

```
x = 5  
y = "John"  
print(x + y)
```

[Run example »](#)

[< Previous](#)[Next >](#)

The image shows the IXL Math Practice interface. At the top is the IXL logo with the text "Math Practice" below it. Below the header is a vertical list of grade levels and subjects, each with a corresponding icon: Kindergarten (dots), First Grade (cup), Second Grade (plus), Third Grade (infinity), Fourth Grade (percent), Fifth Grade (apple), Sixth Grade (less than or equal to), Seventh Grade (pencil), Eighth Grade (approximate), Algebra 1 (x squared), Geometry (triangle), Algebra 2 (square root), and Precalculus (f). At the bottom is a blue button that says "Try 10 FREE practice problems!".

COLOR PICKER



HOW TO

Tabs
Dropdowns
Accordions
Convert Weights

Animated Buttons

Side Navigation

Top Navigation

Modal Boxes

Progress Bars

Parallax

Login Form

HTML Includes

Google Maps

Range Sliders

Tooltips

Slideshow

Filter List

Sort List

SHARE



CERTIFICATES

HTML, CSS, JavaScript, PHP, jQuery, Bootstrap and XML.

[Read More »](#)



File APIs
for Cloud

OPEN CREATE
CONVERT & SAVE

Files
in your applications!

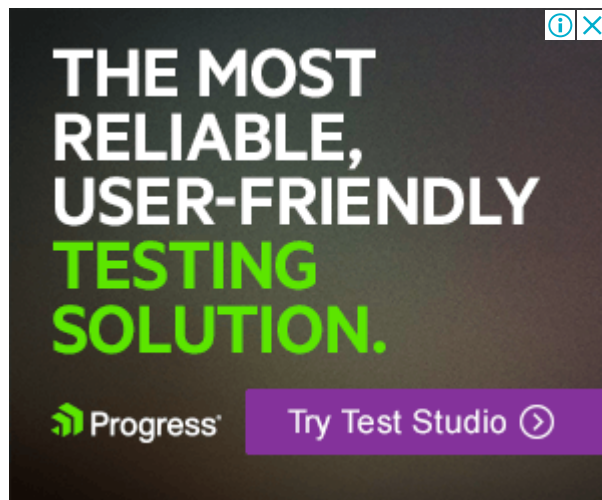
Platform
Independence

DOC XLS PDF PPT EML

Try for FREE

ASPOSE
File Format APIs

This advertisement for ASPOSE File APIs for Cloud features a blue and white color scheme. At the top, the logo 'File APIs for Cloud' is displayed. Below it, the text 'OPEN CREATE CONVERT & SAVE' is written in orange. The word 'Files' is in a blue script font, followed by 'in your applications!'. 'Platform Independence' is written in orange. A central graphic shows a blue circle containing icons for various file formats: DOC, XLS, PDF, PPT, and EML. Below this, an orange button with a white play icon says 'Try for FREE'. The ASPOSE logo and 'File Format APIs' are at the bottom.



THE MOST
RELIABLE,
USER-FRIENDLY
TESTING
SOLUTION.

Progress®

Try Test Studio >

This advertisement for Progress Test Studio has a dark background. The main text 'THE MOST RELIABLE, USER-FRIENDLY TESTING SOLUTION.' is in white and green. The Progress logo is in the bottom left, and a purple button with the text 'Try Test Studio' and a right arrow is in the bottom right.

[REPORT ERROR](#)[PRINT PAGE](#)[FORUM](#)[ABOUT](#)

Top 10 Tutorials

[HTML Tutorial](#)[CSS Tutorial](#)[JavaScript Tutorial](#)[How To Tutorial](#)[W3.CSS Tutorial](#)[Bootstrap Tutorial](#)[SQL Tutorial](#)[PHP Tutorial](#)[jQuery Tutorial](#)[Angular Tutorial](#)

Top 10 References

[HTML Reference](#)[CSS Reference](#)[JavaScript Reference](#)[W3.CSS Reference](#)[Bootstrap Reference](#)[SQL Reference](#)[PHP Reference](#)[HTML Colors](#)[jQuery Reference](#)[AngularJS Reference](#)

Top 10 Examples

[HTML Examples](#)[CSS Examples](#)[JavaScript Examples](#)[How To Examples](#)[W3.CSS Examples](#)[Bootstrap Examples](#)[PHP Examples](#)[jQuery Examples](#)[Angular Examples](#)[XML Examples](#)

Web Certificates

[HTML Certificate](#)[CSS Certificate](#)[JavaScript Certificate](#)[jQuery Certificate](#)[PHP Certificate](#)[Bootstrap Certificate](#)[XML Certificate](#)

W3Schools is optimized for learning, testing, and training. Examples might be simplified to improve reading and basic understanding. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using this site, you agree to have read and accepted our terms of use, cookie and privacy policy. Copyright 1999-2018 by Refsnes Data. All Rights Reserved.

Powered by W3.CSS.

