/MY JOURNAL TO PYTHON

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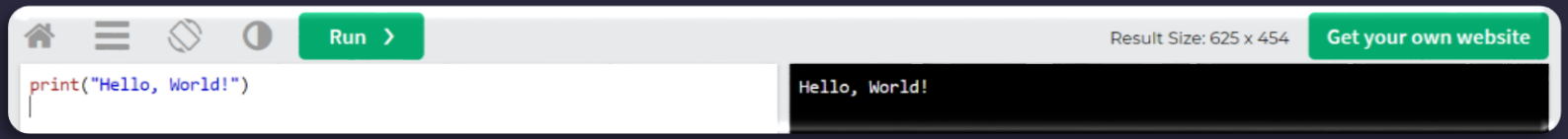
<WHAT IS PYTHON>

/LEARN PYTHON

- Python is a popular programming language.
- Python can be used on a server to create web applications.

Example:



/WHAT PYTHON

- Python is a popular programming language.
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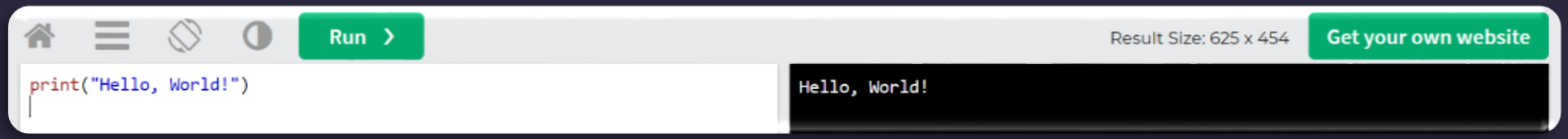
Example:



/WHAT IS PYTHON

Python is a popular programming language. It was created by Guido van Rossum, and released in 1991.

It is used for:

- web development (server-side),
- software development,
- mathematics,
- system scripting.

/WHAT IS PYTHON

What can Python do?

- Python can be used on a server to create web applications.
- Python can be used alongside software to create workflows.
- Python can connect to database systems. It can also read and modify files.
- Python can be used to handle big data and perform complex mathematics.
- Python can be used for rapid prototyping, or for production-ready software development.

/WHY PYTHON?

- Python works on different platforms (Windows, Mac, Linux, Raspberry Pi, etc).
- Python has a simple syntax similar to the English language.
- Python has syntax that allows developers to write programs with fewer lines than some other programming languages.
- Python runs on an interpreter system, meaning that code can be executed as soon as it is written. This means that prototyping can be very quick.
- Python can be treated in a procedural way, an object-oriented way or a functional way.

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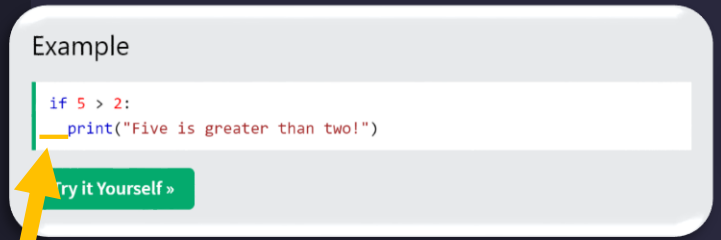
<PYTHON SYNTAX>

/PYTHON INDENTATION

Indentation refers to the spaces at the beginning of a code line.

Where in other programming languages the indentation in code is for readability only, the indentation in Python is very important.

Python uses **indentation** to indicate a block of code.



Indentation

/PYTHON INDENTATION

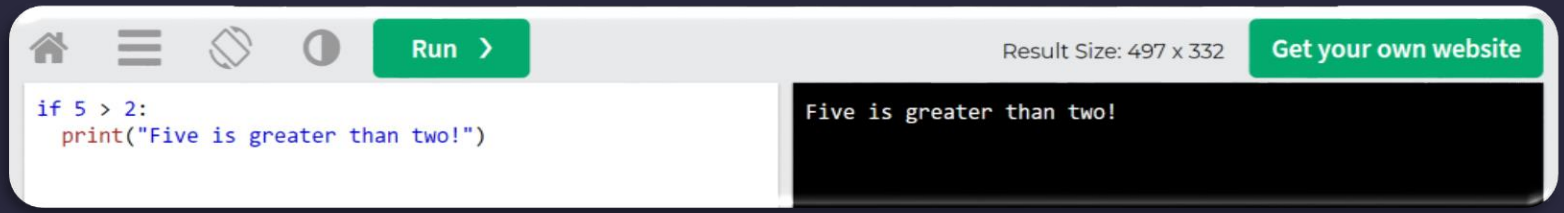
Python uses **indentation** to indicate a block of code.

Example

```
if 5 > 2:
    print("Five is greater than two!")
```

Try it Yourself »

With Indentation



/PYTHON INDENTATION

Python will give you an error if you skip the indentation:

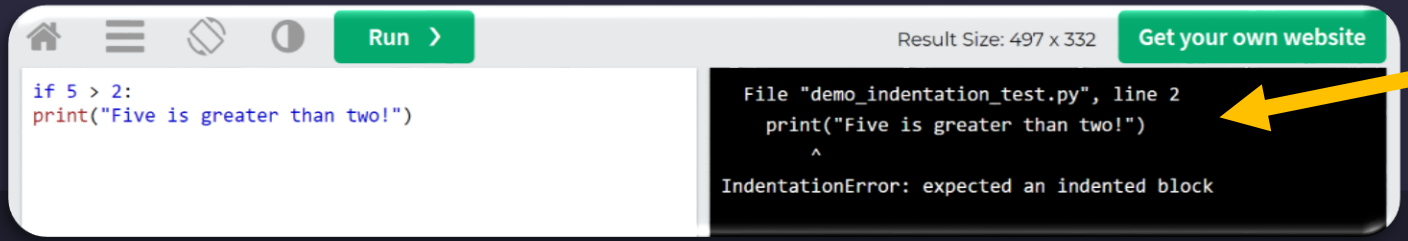
Example

Syntax Error:

```
if 5 > 2:
print("Five is greater than two!")
```

Try it Yourself »

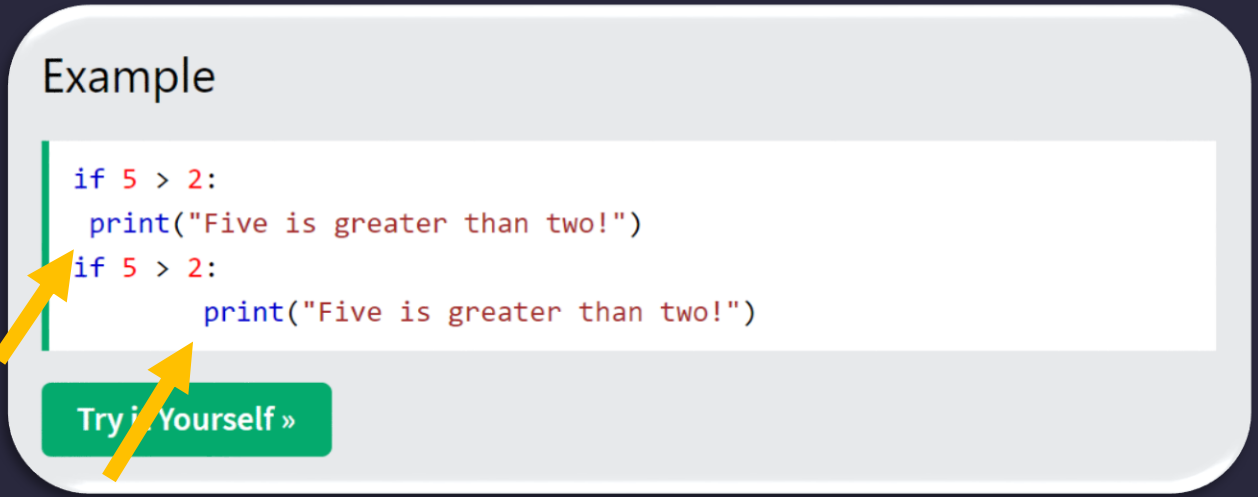
W/O Indentation



RESULT

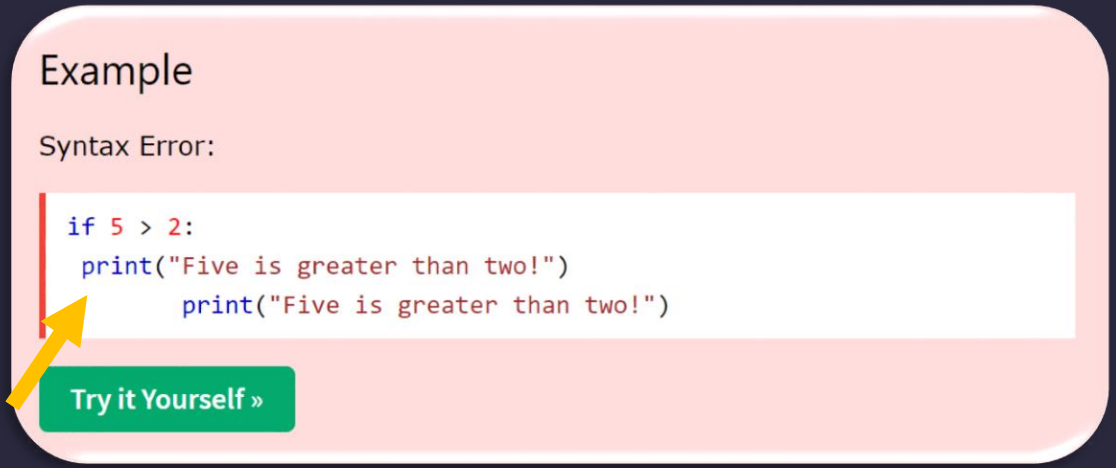
/PYTHON INDENTATION

The number of spaces is up to you as a programmer, the most common use is four, but it has to be at least one.



/PYTHON INDENTATION

You have to use the same number of spaces in the same block of code, otherwise Python will give you an error:



/PYTHON VARIABLES

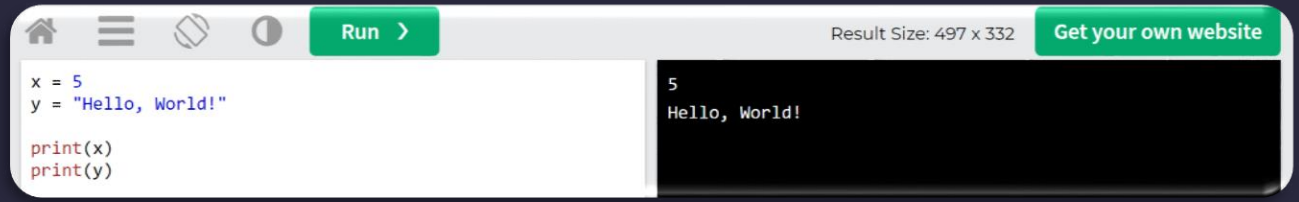
In Python, **variables** are created when you assign a value to it:

Example

Variables in Python:

```
x = 5
y = "Hello, World!"
```

Try it Yourself »



*Python has no command for declaring a variable.

/PYTHON COMMENTS

- Comments can be used to explain Python code.
- Comments can be used to make the code more readable.
- Comments can be used to prevent execution when testing code.

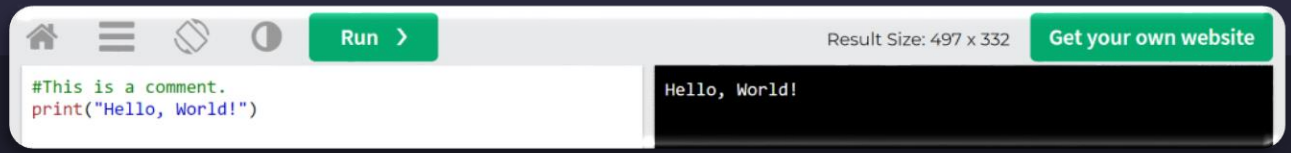
Creating a Comment:

Comments starts with a #, and Python will ignore them:

Example

```
#This is a comment
print("Hello, World!")
```

Try it Yourself »



Comments starts with a #, and Python will ignore them.

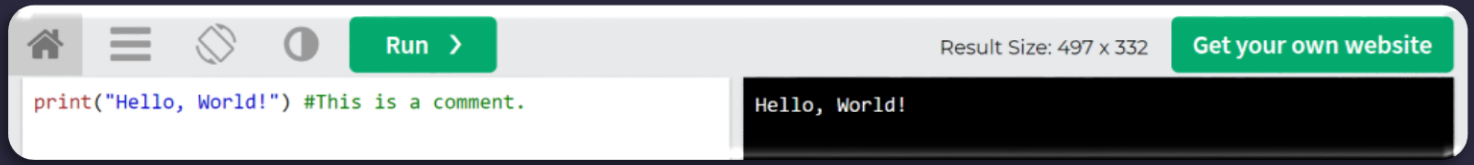
/PYTHON COMMENTS

Comments can be placed at the end of a line, and Python will ignore the rest of the line:

Example

```
print("Hello, World!") #This is a comment
```

Try it Yourself »



Comments starts with a #, and Python will ignore them:

/PYTHON COMMENTS -

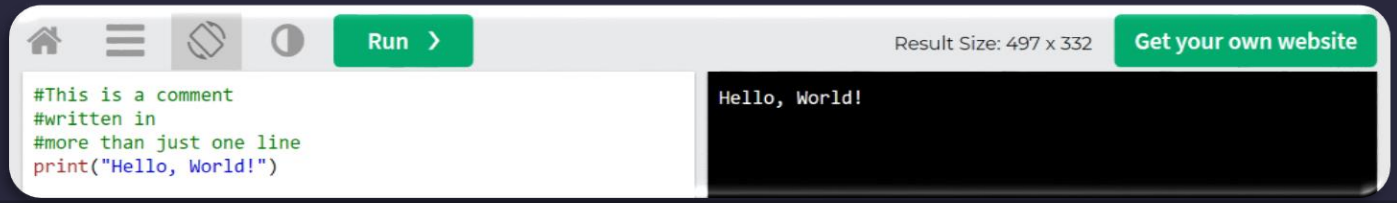
Multi Line Comments

Python does not really have a syntax for multi line comments.
To add a multiline comment you could insert a # for each line:

Example

```
#This is a comment
#written in
#more than just one line
print("Hello, World!")
```

Try it Yourself »



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<WHY LEARN PYTHON>

/WHY TO LEARN PYTHON

Python is a very popular general-purpose interpreted, interactive, Python is consistently rated as one of the world's most popular programming languages. Python is fairly easy to learn, so if you are starting to learn any programming language then Python could be your great choice. Today various Schools, Colleges and Universities are teaching Python as their primary programming language. There are many other good reasons which makes Python as the top choice of any programmer:

- Python is Open Source which means its available free of cost.
- Python is simple and so easy to learn
- Python is versatile and can be used to create many different things.
- Python has powerful development libraries include AI, ML etc.
- Python is much in demand and ensures high salary

/WHY TO LEARN PYTHON

Python is a MUST for students and working professionals to become a great Software Engineer specially when they are working in Web Development Domain. I will list down some of the key advantages of learning Python:

- **Python is Interpreted** - Python is processed at runtime by the interpreter. You do not need to compile your program before executing it. This is similar to PERL and PHP.
- **Python is Interactive** - You can actually sit at a Python prompt and interact with the interpreter directly to write your programs.
- **Python is Object-Oriented** - Python supports Object-Oriented style or technique of programming that encapsulates code within objects.
- **Python is a Beginner's Language** - Python is a great language for the beginner-level programmers and supports the development of a wide range of applications from simple text processing to WWW browsers to games.

/05

<Python Online Compiler/Interpreter>

/ONLINE COMPILER/INTERPRETER

We have provided **Python Online Compiler/Interpreter** which helps you to **Edit** and **Execute** the code directly from your browser.

JUST CLICK HERE:
1. Choice One
2. Choice Two

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<GOOGLE COLLAB>

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<PYTHON CODE>