

Python 1 Worksheet: Output, Operators and Data

Student Resource



Python Worksheet 1 - Output, Operators and Data.docx



Python Worksheet 1 - Output, Operators and Data.pdf

You will need a way to run Python for this worksheet. You can use this [link](#) or ask your teacher.

Activity 1: Hello world!

Type the Python program below into the Python interpreter and run it.

```
print("Hello world!")
```

Did it work or did you get an error? If you encounter an error message, read it and try to fix the problem. Use the list to check for common errors and tick if you find yours.

| Error | Tick here |
|--|-----------|
| Misspelt <code>print</code> (this includes using capital letters) | |
| Missed one or both of <code>print</code> 's brackets | |
| Using square brackets instead of round brackets | |
| Missed one or both of the quotation marks around <code>"Hello world!"</code> | |

Activity 2: Common Errors

These are common errors in Python. Even if you notice the error immediately, try each of them and make a note of the error message. This will help you if you accidentally make the same error later.

| Python code | Result | Explanation |
|----------------------------------|--------|-------------|
| <pre>PRINT("Hello world!")</pre> | | |
| <pre>print("Hello world")</pre> | | |
| <pre>print("Hello world!")</pre> | | |

Activity 3: Mathematical Operators

Programming languages can do mathematical calculations for you. Here are some of Python's mathematical operators. Some you will recognise but others will need investigation. Find out what each of these operators does by trying to print some expressions. If you aren't sure, you might need to try a few different values. Fill in the output and description for each operator and example.

| Operator | Example | Output | What does this operator do? |
|----------|---------------------------|--------|-----------------------------|
| + | <pre>print(17 + 3)</pre> | | |
| - | <pre>print(20 - 11)</pre> | | |
| * | <pre>print(15 * 3)</pre> | | |
| / | <pre>print(11 / 5)</pre> | | |
| // | <pre>print(11 // 5)</pre> | | |
| | <pre>print(17 // 5)</pre> | | |
| % | <pre>print(11 % 5)</pre> | | |
| | <pre>print(17 % 5)</pre> | | |

| Operator | Example | Output | What does this operator do? |
|----------|-----------------------------|--------|-----------------------------|
| ** | <code>print(10 ** 2)</code> | | |
| | <code>print(2 ** 3)</code> | | |

Activity 4: Data Types

What data type are each of these values?

| Value | Data Type |
|--------|-----------|
| -20 | |
| 0 | |
| 1.0 | |
| "100" | |
| True | |
| "True" | |

Activity 5: Investigation Task

Find out what these lines of Python output, don't guess!

| Code | Output | Explanation |
|---------------------------------|--------|-------------|
| <code>print(10 + 15)</code> | | |
| <code>print("10" + "15")</code> | | |
| <code>print("10 + 15")</code> | | |