
ASTsearch Documentation

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ASTsearch is an intelligent search tool for Python code.

To get it:

```
pip install astsearch
```

To use it:

```
# astsearch pattern [path]
astsearch "?/?" # Division operations in all files in the current directory
```

pattern

A search pattern, using ? as a wildcard to match anything. The pattern must be a valid Python statement once all ? wildcards have been replaced with a name.

path

A Python file or a directory in which to search. Directories will be searched recursively for .py and .pyw files.

Contents:

class `astsearch.ASTPatternFinder` (*pattern*)

Scans Python code for AST nodes matching pattern.

Parameters `pattern` (*ast.AST*) – The node pattern to search for

scan_ast (*tree*)

Walk an AST and yield nodes matching pattern.

Parameters `tree` (*ast.AST*) – The AST in which to search

scan_file (*file*)

Parse a file and yield AST nodes matching pattern.

Parameters `file` – Path to a Python file, or a readable file object

scan_directory (*directory*)

Walk files in a directory, yielding (filename, node) pairs matching pattern.

Parameters `directory` (*str*) – Path to a directory to search

Only files with a `.py` or `.pyw` extension will be scanned.

`astsearch.prepare_pattern` (*s*)

Turn a string pattern into an AST pattern

This parses the string to an AST, and generalises it a bit for sensible matching. `?` is treated as a wildcard that matches anything. Names in the pattern will match names or attribute access (i.e. `foo` will match `bar.foo` in files).

See also:

astcheck The AST pattern matching used by ASTsearch

Green Tree Snakes An overview of the available AST nodes and how to work with them

See also:

astpath Search through ASTs using XPath syntax

CHAPTER 2

Indices and tables

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