

Core Functionality

The [argparse](#) module's support for command-line interfaces is built around an instance of [argparse.ArgumentParser](#). It is a container for argument specifications and has options that apply to the parser as whole:

```
parser = argparse.ArgumentParser(
    prog='ProgramName',
    description='What the program does',
    epilog='Text at the bottom of help')
```

The [ArgumentParser.add_argument\(\)](#) method attaches individual argument specifications to the parser. It supports positional arguments, options that accept values, and on/off flags:

```
parser.add_argument('filename')           # positional argument
parser.add_argument('-c', '--count')      # option that takes a value
parser.add_argument('-v', '--verbose',
                    action='store_true')  # on/off flag
```

The [ArgumentParser.parse_args\(\)](#) method runs the parser and places the extracted data in a [argparse.Namespace](#) object:

```
args = parser.parse_args()
print(args.filename, args.count, args.verbose)
```

Quick Links for add_argument()

| Name | Description | Values |
|---------|---|---|
| action | Specify how an argument should be handled | store', 'store_const', 'store_true', 'append', 'append_const', 'count', 'help', 'version' |
| choices | Limit values to a specific set of choices | ['foo', 'bar'], range(1, 10), or Container instance |
| const | Store a constant value | |

| | | |
|----------|--|--|
| default | Default value used when an argument is not provided | Defaults to None |
| dest | Specify the attribute name used in the result namespace | |
| help | Help message for an argument | |
| metavar | Alternate display name for the argument as shown in help | |
| nargs | Number of times the argument can be used | <u>int, '?', '*', or '+'</u> |
| required | Indicate whether an argument is required or optional | True or False |
| type | Automatically convert an argument to the given type | int, float, argparse.FileType('w'), or callable function |