# A Gentle Introduction to Command-Line Interfaces

**PDM Code Clinic** 





- \$ path/to/command foo -a bar -b --long
- Shell Prompt varies with shell or command executive function



- Shell Prompt varies with shell or command executive function
- File system path ending in the name of an executable file



- Shell Prompt varies with shell or command executive function
- File system path ending in the name of an executable file
- A bare argument



- Shell Prompt varies with shell or command executive function
- File system path ending in the name of an executable file
- A bare argument
- A switch with an optional value



- Shell Prompt varies with shell or command executive function
- File system path ending in the name of an executable file
- A bare argument
- A switch with an optional value
- A bare short switch



- Shell Prompt varies with shell or command executive function
- File system path ending in the name of an executable file
- A bare argument
- A switch with an optional value
- A bare short switch
- A bare long switch



#### Print the Contents of sys.argv

```
1 import sys
2 if __name__ == "__main__":
3     for n, item in enumerate(sys.argv):
4         print(f"argv[{n}] == {item}")
5     exit(11)
```



#### Print the Contents of sys.argv

```
$ python3 -m cli.00-dump-argv foo -b bar -v --long
argv[0] == .../cli-examples/cli/00-dump-argv/__main__.py
argv[1] == foo
argv[2] == -b
argv[3] == bar
argv[4] == -v
argv[5] == --long
```

# Live Coding

https://github.com/JnyJny/cli-examples

# A Gentle Introduction to Command-Line Interfaces Resouces

- https://github.com/JnyJny/cli-examples
- https://pybit.es/articles/guest-exploring-python-clis
- https://docs.python.org/3/library/argparse.html
- https://click.palletsprojects.com/en/8.0.x/#
- https://typer.tiangolo.com



# Q&A