```
# Demonstrates import and random.choice
import random

coin = random.choice(["heads", "tails"])
print(coin)
```

```
# Demonstrates from
from random import choice
coin = choice(["heads", "tails"])
print(coin)
```

```
# Demonstrates randint

import random

number = random.randint(1, 10)
print(number)
```

```
# Demonstrates shuffle

import random

cards = ["jack", "queen", "king"]

random.shuffle(cards)

for card in cards:
    print(card)
```

```
# Demonstrates statistics
import statistics
print(statistics.mean([100, 90]))
```

```
# Demonstrates sys.argv
import sys
print("hello, my name is", sys.argv[1])
```

```
# Demonstrates IndexError

import sys

try:
    print("hello, my name is", sys.argv[1])
except IndexError:
    print("Too few arguments")
```

```
import sys

if len(sys.argv) < 2:
    print("Too few arguments")

elif len(sys.argv) > 2:
    print("Too many arguments")

else:
    print("hello, my name is", sys.argv[1])
```

```
import sys
import sys

filen(sys.argv) < 2:
    sys.exit("Too few arguments")
elif len(sys.argv) > 2:
    sys.exit("Too many arguments")

print("hello, my name is", sys.argv[1])
```

```
# Demonstrates list slice

import sys

if len(sys.argv) < 2:
    sys.exit("Too few arguments")

for arg in sys.argv[1:]:
    print("hello, my name is", arg)</pre>
```

```
# Demonstrates pip-installed package
import cowsay
import sys

if len(sys.argv) == 2:
    cowsay.cow("hello, " + sys.argv[1])
```

```
# Demonstrates a t-rex

import cowsay
import sys

if len(sys.argv) == 2:
    cowsay.trex("hello, " + sys.argv[1])
```

```
# Demonstrates requests
 2
 3
    import sys
    import requests
 6
    if len(sys.argv) != 2:
        sys.exit()
 8
 9
    response = requests.get(
10
        "https://itunes.apple.com/search?entity=song&limit=1&term=" + sys.argv[1]
11
12
    print(response.json())
```

```
1
    # Demonstrates json
 2
    import json
    import sys
    import requests
 6
 7
    if len(sys.argv) != 2:
        sys.exit()
 8
 9
10
    response = requests.get(
11
        "https://itunes.apple.com/search?entity=song&limit=1&term=" + sys.argv[1]
12
    print(json.dumps(response.json(), indent=2))
13
```

```
1
    # Demonstrates iterating over JSON
2
    import json
3
    import sys
    import requests
 6
7
    if len(sys.argv) != 2:
        sys.exit()
 8
9
10
    response = requests.get(
11
        "https://itunes.apple.com/search?entity=song&term=" + sys.argv[1]
12
    o = response.json()
13
    for result in o["results"]:
14
        print(result["trackName"])
15
```

```
def hello(name):
    print(f"hello, {name}")

def goodbye(name):
    print(f"goodbye, {name}")
```

```
# Demonstrates own module

import sys

from sayings0 import hello

if len(sys.argv) == 2:
    hello(sys.argv[1])
```

```
# Doesn't check __name__
 1
 2
 3
    def main():
        hello("world")
 5
        goodbye("world")
 6
 7
 8
    def hello(name):
        print(f"hello, {name}")
 9
10
11
12
    def goodbye(name):
        print(f"goodbye, {name}")
13
14
15
16
    main()
```

```
# Demonstrates own module

import sys

from sayings1 import hello

if len(sys.argv) == 2:
    hello(sys.argv[1])
```

```
1
    # Check __name__
 2
 3
    def main():
        hello("world")
 5
        goodbye("world")
 6
 7
 8
    def hello(name):
 9
        print(f"hello, {name}")
10
11
12
    def goodbye(name):
        print(f"goodbye, {name}")
13
14
15
16
    if __name__ == "__main__":
17
        main()
```

```
# Demonstrates own module

import sys

from sayings2 import hello

if len(sys.argv) == 2:
    hello(sys.argv[1])
```

```
# Demonstrates own module
import sys
from sayings2 import goodbye
if len(sys.argv) == 2:
    goodbye(sys.argv[1])
```