# Demonstrates a function with a positional argument

print("hello, world")
# Demonstrates a function with a positional argument and a return value

def hello(name):
    return f'Hello, {name}!

name = input("What's your name? ")
print("hello,")
print(name)
# Demonstrates concatenation of strings

name = input("What's your name? ")

print("hello, \n" + name)
# Demonstrates a function with two positional arguments

name = input("What's your name? ")
print("hello," , name)
# Demonstrates a function with a positional argument and a named argument

name = input("What's your name? ")
print("hello, ", end="")
print(name)
# Demonstrates a format string

name = input("What's your name? ")

print(f"hello, {name}")
# Demonstrates str functions

name = input("What's your name? ").strip().title()
print(f"hello, {name}")
# Demonstrates addition

x = 1
y = 2

z = x + y

print(z)
# Demonstrates (unintended) concatenation of strings

# Prompt user for two integers
x = input("What's x? ")
y = input("What's y? ")

# Print sum
z = x + y
print(z)
# Demonstrates conversion from str to int

```python
x = input("What's x? ")
y = input("What's y? ")

z = int(x) + int(y)
print(z)
```

# Demonstrates nesting of function calls

```python
x = int(input("What's x? "))
y = int(input("What's y? "))
z = x + y
print(z)
```
# Demonstrates conversion of str to float

```python
x = float(input("What's x? "))
y = float(input("What's y? "))
z = x + y
print(z)
```
# Demonstrates rounding to nearest int

```python
x = float(input("What's x? "))
y = float(input("What's y? "))
z = round(x + y)
print(z)
```
# Demonstrates fewer variables

```python
x = float(input("What's x? "))
y = float(input("What's y? "))
print(round(x + y))
```
# Demonstrates formatting with commas

```python
x = float(input("What's x? "))
y = float(input("What's y? "))

z = round(x + y)

print(f"z:,")
```

# Demonstrates division

```python
x = float(input("What's x? "))
y = float(input("What's y? "))
z = x / y
print(z)
```
# Demonstrates rounding after the decimal point

```python
x = float(input("What's x? "))
y = float(input("What's y? "))

z = round(x / y, 2)

print(z)
```

# Demonstrates formatting after the decimal place

```python
x = int(input("What's x? "))

y = int(input("What's y? "))

z = x / y

print(f"{z:.2f}"")
```
# Demonstrates defining a function without parameters

def hello():
    print("hello")

name = input("What's your name? ")
hello()
print(name)
# Demonstrates defining a function with a parameter

def hello(to):
    print("hello," + to)

name = input("What's your name? ")
hello(name)
# Demonstrates defining a function with a parameter with a default value

def hello(to="world"):
    print("hello,", to)

hello()
name = input("What's your name? ")
hello(name)
# Demonstrates defining a main function

def main():
    name = input("What's your name? ")
    hello(name)

def hello(to="world"):
    print("hello,", to)

main()
# Demonstrates defining a function with a return value

def main():
    x = int(input("What's x? "))
    print("x squared is", square(x))

def square(n):
    return n * n

main()