
```
1  # Demonstrates a function with a positional argument
2
3  print("hello, world")
```

```
1  # Demonstrates a function with a positional argument and a return value
2
3  name = input("What's your name? ")
4  print("hello,")
5  print(name)
```

```
1  # Demonstrates concatenation of strings
2
3  name = input("What's your name? ")
4  print("hello, " + name)
```

```
1  # Demonstrates a function with two positional arguments
2
3  name = input("What's your name? ")
4  print("hello,", name)
```

```
1  # Demonstrates a function with a positional argument and a named argument
2
3  name = input("What's your name? ")
4  print("hello, ", end="")
5  print(name)
```

```
1  # Demonstrates a format string
2
3  name = input("What's your name? ")
4  print(f"hello, {name}")
```

```
1  # Demonstrates str functions
2
3  name = input("What's your name? ").strip().title()
4  print(f"hello, {name}")
```

```
1  # Demonstrates addition
2
3  x = 1
4  y = 2
5
6  z = x + y
7
8  print(z)
```

```
1  # Demonstrates (unintended) concatenation of strings
2
3  # Prompt user for two integers
4  x = input("What's x? ")
5  y = input("What's y? ")
6
7  # Print sum
8  z = x + y
9  print(z)
```

```
1  # Demonstrates conversion from str to int
2
3  x = input("What's x? ")
4  y = input("What's y? ")
5
6  z = int(x) + int(y)
7
8  print(z)
```

```
1  # Demonstrates nesting of function calls
2
3  x = int(input("What's x? "))
4  y = int(input("What's y? "))
5
6  z = x + y
7
8  print(z)
```

```
1  # Demonstrates conversion of str to float
2
3  x = float(input("What's x? "))
4  y = float(input("What's y? "))
5
6  z = x + y
7
8  print(z)
```

```
1  # Demonstrates rounding to nearest int
2
3  x = float(input("What's x? "))
4  y = float(input("What's y? "))
5
6  z = round(x + y)
7
8  print(z)
```

```
1  # Demonstrates fewer variables
2
3  x = float(input("What's x? "))
4  y = float(input("What's y? "))
5
6  print(round(x + y))
```

```
1  # Demonstrates formatting with commas
2
3  x = float(input("What's x? "))
4  y = float(input("What's y? "))
5
6  z = round(x + y)
7
8  print(f"{z:,}")
```

```
1  # Demonstrates division
2
3  x = float(input("What's x? "))
4  y = float(input("What's y? "))
5
6  z = x / y
7
8  print(z)
```

```
1  # Demonstrates rounding after the decimal point
2
3  x = float(input("What's x? "))
4  y = float(input("What's y? "))
5
6  z = round(x / y, 2)
7
8  print(z)
```

```
1  # Demonstrates formatting after the decimal place
2
3  x = int(input("What's x? "))
4  y = int(input("What's y? "))
5
6  z = x / y
7
8  print(f"{z:.2f}")
```

```
1  # Demonstrates defining a function without parameters
2
3
4  def hello():
5      print("hello")
6
7
8  name = input("What's your name? ")
9  hello()
10 print(name)
```

```
1  # Demonstrates defining a function with a parameter
2
3
4  def hello(to):
5      print("hello,", to)
6
7
8  name = input("What's your name? ")
9  hello(name)
```

```
1  # Demonstrates defining a function with a parameter with a default value
2
3
4  def hello(to="world"):
5      print("hello,", to)
6
7
8  hello()
9  name = input("What's your name? ")
10 hello(name)
```

```
1  # Demonstrates defining a main function
2
3
4  def main():
5      name = input("What's your name? ")
6      hello(name)
7
8
9  def hello(to="world"):
10     print("hello,", to)
11
12
13  main()
```

```
1  # Demonstrates defining a function with a return value
2
3
4  def main():
5      x = int(input("What's x? "))
6      print("x squared is", square(x))
7
8
9  def square(n):
10     return n * n
11
12
13  main()
```