
```
1 # Demonstrates multiple (identical) function calls
2
3 print("meow")
4 print("meow")
5 print("meow")
```

```
1 # Demonstrates a while loop, counting down
2
3 i = 3
4 while i != 0:
5     print("meow")
6     i = i - 1
```

```
1 # Demonstrates a while loop, counting up from 1
2
3 i = 1
4 while i <= 3:
5     print("meow")
6     i = i + 1
```

```
1 # Demonstrates a while loop, counting up from 0
2
3 i = 0
4 while i < 3:
5     print("meow")
6     i = i + 1
```

```
1 # Demonstrates (more succinct) incrementation
2
3 i = 0
4 while i < 3:
5     print("meow")
6     i += 1
```

```
1 # Demonstrates a for loop, using a list
2
3 for i in [0, 1, 2]:
4     print("meow")
```

```
1 # Demonstrates a for loop, using range
2
3 for i in range(3):
4     print("meow")
```

```
1 # Demonstrates a for loop, with _ as a variable
2
3 for _ in range(3):
4     print("meow")
```

```
1 # Demonstrates str multiplication
2
3 print("meow\n" * 3, end="")
```

```
1 # Introduces continue, break
2
3 while True:
4     n = int(input("What's n? "))
5     if n <= 0:
6         continue
7     else:
8         break
9
10 for _ in range(n):
11     print("meow")
```

```
1 # Removes continue
2
3 while True:
4     n = int(input("What's n? "))
5     if n > 0:
6         break
7
8 for _ in range(n):
9     print("meow")
```

```
1 # Demonstrates defining functions
2
3
4 def main():
5     meow(get_number())
6
7
8 def get_number():
9     while True:
10        n = int(input("What's n? "))
11        if n > 1:
12            return n
13
14
15 def meow(n):
16     for _ in range(n):
17         print("meow")
18
19
20 main()
```

```
1 # Demonstrates indexing into a list
2
3 students = ["Hermione", "Harry", "Ron"]
4
5 print(students[0])
6 print(students[1])
7 print(students[2])
```

```
1 # Demonstrates iterating over a list
2
3 students = ["Hermione", "Harry", "Ron"]
4
5 for student in students:
6     print(student)
```

```
1 # Demonstrates iterating over and indexing into a list
2
3 students = ["Hermione", "Harry", "Ron"]
4
5 for i in range(len(students)):
6     print(i + 1, students[i])
```

```
1 # Demonstrates indexing into a dict
2
3 students = {
4     "Hermione": "Gryffindor",
5     "Harry": "Gryffindor",
6     "Ron": "Gryffindor",
7     "Draco": "Slytherin",
8 }
9
10 print(students["Hermione"])
11 print(students["Harry"])
12 print(students["Ron"])
13 print(students["Draco"])
```

```
1 # Demonstrates iterating over and index into a dict
2
3 students = {
4     "Hermione": "Gryffindor",
5     "Harry": "Gryffindor",
6     "Ron": "Gryffindor",
7     "Draco": "Slytherin",
8 }
9
10 for student in students:
11     print(student, students[student], sep=", ")
```

```
1 # Demonstrates iterating over a list of dict objects
2
3 students = [
4     {"name": "Hermione", "house": "Gryffindor", "patronus": "Otter"},
5     {"name": "Harry", "house": "Gryffindor", "patronus": "Stag"},
6     {"name": "Ron", "house": "Gryffindor", "patronus": "Jack Russell terrier"},
7     {"name": "Draco", "house": "Slytherin", "patronus": None},
8 ]
9
10 for student in students:
11     print(student["name"], student["house"], student["patronus"], sep=", ")
```

```
1 # Prints a column of bricks
2
3 print("#")
4 print("#")
5 print("#")
```

```
1 # Prints column of bricks using a loop
2
3 for _ in range(3):
4     print("#")
```

```
1 # Prints column of bricks using a function with a loop
2
3
4 def main():
5     print_column(3)
6
7
8 def print_column(height):
9     for _ in range(height):
10        print("#")
11
12
13 main()
```

```
1 # Prints column of bricks using a function with str multiplication
2
3
4 def main():
5     print_column(3)
6
7
8 def print_column(height):
9     print("#\n" * height, end="")
10
11
12 main()
```

```
1 # Prints row of coins using a function with str multiplication
2
3
4 def main():
5     print_row(4)
6
7
8 def print_row(width):
9     print("?" * width)
10
11
12 main()
```

```
1 # Prints square of bricks using a function with nested loops
2
3
4 def main():
5     print_square(3)
6
7
8 def print_square(size):
9     for i in range(size):
10        for j in range(size):
11            print("#", end="")
12        print()
13
14
15 main()
```

```
1 # Prints square of bricks using a function with a loop and str multiplication
2
3
4 def main():
5     print_square(3)
6
7
8 def print_square(size):
9     for _ in range(size):
10        print("#" * size)
11
12
13 main()
```

```
1 # Prints square of bricks using a function with a loop and str multiplication
2
3
4 def main():
5     print_square(3)
6
7
8 def print_square(size):
9     for _ in range(size):
10        print_row(size)
11
12
13 def print_row(width):
14     print("#" * width)
15
16
17 main()
```