题目1:

```
my_set = {1, 2, 3, 4, 5}
my_set.add(3)
print(len(my_set))
```

问：输出的结果是什么？

A) 5

B) 6

C) 4

D) 3

题目2:

```
my_dict = {'apple': 1, 'banana': 2, 'cherry': 3}
value = my_dict.get('banana')
```

问：变量 `value` 的值是什么？

A) 'banana'

B) 2

C) 1

D) None

题目3:

```
my_set = {'apple', 'banana', 'cherry'}
my_set.remove('date')
```

问：执行这段代码后会发生什么？

A) 'date' 被从集合中移除

B) 集合不变

C) 抛出 KeyError 异常

D) 抛出 ValueError 异常

题目4:

```
my_dict = {'a': 1, 'b': 2, 'c': 3}
my_dict['a'] = 10
total = sum(my_dict.values())
```

问：变量 `total` 的值是多少？

A) 3

B) 6

C) 15

D) 13

题目5:

```
my_set1 = {1, 2, 3}
my_set2 = {3, 4, 5}
my_set3 = my_set1.intersection(my_set2)
```

问：`my_set3` 的内容是什么？

A) {1, 2, 3, 4, 5}

B) {3, 4, 5}

C) {1, 2}

D) {3}

题目6:

```
scores = {"Alice": 85, "Bob": 90, "Charlie": 75}
del scores["Bob"]
print("Bob" in scores)
```

问：这段代码的输出是什么？

A) True

B) False

C) 90

D) KeyError

题目7:

```
fruits = {"apple", "banana", "cherry"}
fruits.update(["apple", "orange"])
print(len(fruits))
```

问：输出的结果是什么？

A) 3

B) 4

C) 5

D) 6

题目8:

```
data = {'a': 1, 'b': 2}
data['c'] = 3
total_keys = len(data)
```

问：`total_keys` 的值是多少？

A) 2

B) 3

C) 4

D) 5

题目9:

```
items = {'a': 1, 'b': 2, 'c': 3}
items.pop('b')
print('b' in items)
```

问：这段代码的输出是什么？

A) True

B) False

C) 2

D) None

题目10:

```
my_set1 = {1, 2, 3}
my_set2 = {4, 5, 6}
my_set3 = my_set1.union(my_set2)
```

问：`my_set3` 的内容是什么？

A) {1, 2, 3}

B) {4, 5, 6}

C) {1, 2, 3, 4, 5, 6}

D) 空集合

题目11:

```
items = {'a': 1, 'b': 2, 'c': 3}
item_values = [v * 2 for v in items.values()]
total = sum(item_values)
```

问：变量 `total` 的值是多少？

A) 6

B) 9

C) 12

D) 15

题目12:

```
original = {1, 2, 3}
subset = {1, 2}
is_subset = subset.issubset(original)
```

问：变量 `is_subset` 的值是什么？

A) True

B) False

C) {1, 2}

D) {1, 2, 3}

题目13:

```
data = {"key1": 10, "key2": 20}
data["key3"] = data.pop("key1")
key_count = len(data)
```

问：`key_count` 的值是多少？

A) 1

B) 2

C) 3

D) 10

题目14:

```
my_set = {1, 2, 3, 4, 5}
my_set.symmetric_difference_update({3, 4, 5, 6, 7})
result = 2 in my_set
```

问：变量 `result` 的值是什么？

A) True

B) False

C) {1, 2}

D) {6, 7}

题目15:

```
keys = ['a', 'b', 'c']
values = [1, 2, 3]
my_dict = dict(zip(keys, values))
my_dict['a'] += 3
```

问：`my_dict` 的内容是什么？

A) {'a': 1, 'b': 2, 'c': 3}

B) {'a': 4, 'b': 2, 'c': 3}

C) {'a': 3, 'b': 2, 'c': 3}

D) {'a': 3, 'b': 5, 'c': 6}

题目16:

```
data = {1: 'a', 2: 'b', 3: 'c'}
inverse_data = {v: k for k, v in data.items()}
result = inverse_data['b']
```

问：变量 `result` 的值是多少？

A) 1

B) 2

C) 'a'

D) 'b'

题目17:

```
my_set = set([i * 2 for i in range(5)])
result = 6 in my_set
```

问：变量 `result` 的值是什么？

A) True

B) False

C) {0, 2, 4, 6, 8}

D) {1, 2, 3, 4}

题目18:

```
data = {'a': 1, 'b': 2, 'c': 3}
removed = data.pop('d', None)
is_none = removed is None
```

问：变量 `is_none` 的值是什么？

A) True

B) False

C) 'd'

D) 3

题目19:

```
keys = ['a', 'b', 'c']
default_value = 0
my_dict = dict.fromkeys(keys, default_value)
my_dict['a'] = 5
total = sum(my_dict.values())
```

问：变量 `total` 的值是多少？

A) 0

B) 5

C) 10

D) 15

题目20:

```
set1 = {1, 2, 3}
set2 = {3, 4, 5}
set3 = set1 ^ set2
result = len(set3)
```

问：变量 `result` 的值是多少？

A) 2

B) 4

C) 5

D) 6

题目21:

```
data = {"a": [1, 2], "b": [3, 4]}
sum_first_elements = sum(item[0] for item in data.values())
```

问：变量 `sum_first_elements` 的值是多少？

A) 3

B) 4

C) 5

D) 6

题目22:

```
data = {('a', 'b'): 1, ('c', 'd'): 2}
result = data[('a', 'b')]
```

问：变量 `result` 的值是多少？

A) 1

B) 2

C) ('a', 'b')

D) ('c', 'd')

题目23:

```
set1 = {x for x in range(5)}
set2 = {x for x in range(2, 7)}
result = set1 < set2
```

问：变量 `result` 的值是什么？

A) True

B) False

C) {0, 1, 2, 3, 4}

D) {2, 3, 4, 5, 6}

题目24:

```
my_dict = {i: i * i for i in range(5)}
value_list = list(my_dict.values())
second_largest = sorted(value_list)[-2]
```

问：变量 `second_largest` 的值是多少？

A) 4

B) 9

C) 12

D) 16

题目25:

```
data = {'a': 1, 'b': 2}
data.setdefault('c', 3)
data.setdefault('a', 4)
total = sum(data.values())
```

问：变量 `total` 的值是多少？

A) 3

B) 4

C) 6

D) 9

题目26:

```
   students = {"Alice": {"math": 80, "science": 90}, "Bob": {"math": 70,
"science": 85}}
   average_math_score = sum(student["math"] for student in
students.values()) / len(students)
```

问：变量 `average_math_score` 的值是多少？

A) 75

B) 80

C) 85

D) 90

题目27:

```
pairs = [(1, 'a'), (2, 'b'), (3, 'c')]
my_dict = dict(pairs)
result = my_dict[2]
```

问：变量 `result` 的值是什么？

A) 1

B) 2

C) 'a'

D) 'b'

题目28:

```
data = {1: "one", 2: "two", 3: "three"}
keys = list(data.keys())
keys.sort(reverse=True)
first_key = keys[0]
```

问：变量 `first_key` 的值是什么？

A) 1

B) 2

C) 3

D) 'three'

题目29:

```
items = {"a": 1, "b": 2, "c": 3}
new_items = {k: v for k, v in items.items() if v % 2 == 0}
contains_b = 'b' in new_items
```

问：变量 `contains_b` 的值是什么？

A) True

B) False

C) 1

D) 2

题目30:

```
set1 = {1, 2, 3}
set2 = {2, 3, 4}
set3 = set1.difference(set2)
result = len(set3)
```

问：变量 `result` 的值是多少？

A) 0

B) 1

C) 2

D) 3