

Python MCQS Day3

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1. **What is a key characteristic of a Python dictionary?**
 - A) It is ordered and immutable
 - B) It stores data in key-value pairs and is mutable
 - C) It allows duplicate keys
 - D) It is a collection of ordered items only
2. **Given the dictionary `dict = {"name": "Kaladi", "cgpa": 9.0, "mark": 85}` what will `dict["name"]` return?**
 - A) 9.0
 - B) 85
 - C) Kaladi
 - D) KeyError
3. **What happens if you try to add a duplicate key to a dictionary, as in `dict = {"name": "Subhan", "name": "Kaladi"}`?**
 - A) It raises a KeyError
 - B) It keeps both values
 - C) It updates the value to the latest one ("Kaladi")
 - D) It ignores the duplicate key
4. **Consider the nested dictionary `student = {"name": "Kaladi", "score": {"chem": 98, "phy": 97, "math": 95}}`. How do you access the value 95?**
 - A) `student["score"]["math"]`
 - B) `student["math"]`
 - C) `student["score"][2]`
 - D) `student[1]["math"]`
5. **What does the dictionary method `myDict.keys()` return?**
 - A) All values in the dictionary
 - B) All keys in the dictionary
 - C) A single key-value pair
 - D) The last key added

6. What will `myDict.get("key")` return if "key" does not exist in `myDict`?

- A) KeyError
- B) None
- C) 0
- D) Empty string

7. What is the output of the following code?

```
dict = {"a": 1, "b": 2}
```

```
dict["c"] = 3
```

```
print(dict)
```

- A) {"a": 1, "b": 2}
- B) {"a": 1, "b": 2, "c": 3}
- C) {"c": 3}
- D) Error

8. Which of the following is a valid way to create an empty dictionary?

- A) `dict = {}`
- B) `dict = []`
- C) `dict = ()`
- D) `dict = set()`

9. What is a key property of a Python set?

- A) It allows duplicate elements
- B) It is a collection of ordered items
- C) It contains unique and immutable elements
- D) It is mutable but ordered

10. Given the set `nums = {1, 2, 3, 4}`, what will `nums.add(5)` do?

- A) Raise an error
- B) Add 5 to the set
- C) Replace an existing element
- D) Do nothing

11. What is the output of the following code?

```
set2 = {1, 2, 2, 2}
```

```
print(set2)
```

- A) {1, 2, 2, 2}
- B) {1, 2}
- C) {2}
- D) Error

12. What does the `set.remove(el)` method do?

- A) Adds an element to the set
- B) Removes the specified element, raises `KeyError` if not found
- C) Removes a random element
- D) Clears the entire set

13. What will `set.clear()` do to a set?

- A) Remove one element
- B) Empty the set
- C) Return a copy of the set
- D) Raise an error

14. What is the output of the following code?

```
set1 = {1, 2, 3}
```

```
set2 = {2, 3, 4}
```

```
print(set1.union(set2))
```

- A) {2, 3}
- B) {1, 2, 3, 4}
- C) {1, 4}
- D) Error

15. What does `set1.intersection(set2)` return for `set1 = {1, 2, 3}` and `set2 = {2, 3, 4}`?

- A) {1, 2, 3, 4}
- B) {2, 3}
- C) {1, 4}
- D) Empty set

16. How would you store the meanings of "table" and "cat" in a dictionary as per the practice question?

```
dict = {
```

```
    "table": "a piece of furniture",
```

```
    "cat": "a small animal"
```

}

- A) Correct as shown
- B) Use lists instead of strings
- C) Use tuples as keys
- D) Use sets as values

17. Given the list `subjects = ["python", "java", "C++", "python", "javascript", "java", "python", "java", "C++", "c"]`, how many unique subjects (classrooms) are needed?

- A) 10
- B) 5
- C) 6
- D) 4

18. What is the correct way to create an empty set in Python?

- A) `set = {}`
- B) `set = set()`
- C) `set = []`
- D) `set = ()`

19. What will the following code output?

```
myDict = {}
```

```
myDict["math"] = 90
```

```
myDict["phy"] = 85
```

```
myDict["chem"] = 88
```

```
print(myDict)
```

- A) `{"math": 90, "phy": 85, "chem": 88}`
- B) `["math": 90, "phy": 85, "chem": 88]`
- C) Error
- D) `{}`

20. How can you store 9 and 9.0 as separate values in a set?

- A) Use `{9, 9.0}` directly
- B) Use `{str(9), 9.0}`
- C) Use `{9, float(9)}`
- D) Not possible

21. What will `myDict.values()` return for `myDict = {"a": 1, "b": 2, "c": 3}`?

- A) ["a", "b", "c"]
- B) [1, 2, 3]
- C) [("a", 1), ("b", 2), ("c", 3)]
- D) Error

22. What happens if you try to access a non-existent key using `myDict["key"]`?

- A) Returns None
- B) Raises KeyError
- C) Returns 0
- D) Creates a new key

23. What is the output of the following code?

```
nums = {1, 2, 3}

nums.pop()

print(len(nums))
```

- A) 3
- B) 2
- C) 1
- D) Error

24. Which method can be used to combine two sets and keep only common elements?

- A) union()
- B) intersection()
- C) add()
- D) pop()

25. What is the output of the following code?

```
dict = {"name": "Kaladi", "score": {"chem": 98}}

print(dict["score"]["chem"])
```

- A) Kaladi
- B) 98
- C) {"chem": 98}
- D) Error

Answer Key

1. B
2. C
3. C
4. A
5. B
6. B
7. B
8. A
9. C
10. B
11. B
12. B
13. B
14. B
15. B
16. A
17. B
18. B
19. A
20. B
21. B
22. B
23. B
24. B
25. B

Thank You