

Python Tuples , Lists ,Set and Dictionary
36 Questions

NAME : _____

CLASS : _____

DATE : _____

1. Tuples in Python are mutable

A

False

B

True

2. How to create a single element tuple

A

(1,)

B

{1}

C

(1)

D

[1]

E

tuple([1])

3.

```
numbers = tuple("12345")  
print ( numbers)
```

Result of the program above is

A

('1', '2', '3', '4', '5')

B

"12345"

C

(1, 2, 3, 4, 5)

D

12345

4.

```
numbers = 1,2,3,4,5  
print ( type(numbers) )
```

What is the output of the program above

A

<class 'tuple'>

B

<class 'int'>

C

<class 'list'>

D

<class 'None'>

5.

```
numbers = 1,"2",3,4,5  
print ( type(numbers) )
```

What is the output of the code above

A

(1, '2', 3, 4, 5)

B

('1', '2', '3', '4', '5')

C

syntax error

D

(1, 2, 3, 4, 5)

6.

```
a=(5,6)
b=(5,7)
if (a>b):
    print("a is bigger")
else:
    print("b is bigger")
```

What is the output of the program above ?

☐ A

Syntax error : tuples can't be compared

☐ B

b is bigger

☐ C

a is bigger

7.

```
person = (30, "Name")
age = person[0]
print ( id(person[0]) == id(age) )
```

What is the output of the program above ?

☐ A

True

☐ B

False

8.

Which of these is the correct code for creating a list of names?

☐ A

nameList = ("John", "Harry", "Jesse", "John", "Harry", "Harry")

☐ B

nameList = John, Harry, Jesse, John, Harry, Harry

☐ C

nameList = [John, Harry, Jesse, John, Harry, Harry]

☐ D

nameList = ["John", "Harry", "Jesse", "John", "Harry", "Harry"]

9.

List items have an index number. In the following list, which item has the index number of 3?

["John", "Harry", "Jesse", "John", "Harry", "Harry"]

☐ A

"Jesse"

☐ B

"Harry"

☐ C

"John"

10.

The list needs one more name added to the end - "Felipe". Which piece of code below would do this?

nameList = ["John", "Harry", "Jesse", "John", "Harry", "Harry"]

☐ A

nameList.append("Felipe")

☐ B

nameList.append["Felipe",7]

☐ C

append(nameList,"Felipe")

☐ D

nameList.append(Felipe)

11.

```
colours = []
colours.append("blue")
colours.append("green")
colours.append("red")
print(colours[2])
```

What output will this code produce?

☐ A

blue

☐ B

error

☐ C

red

☐ D

green

12. Consider this list, what will be the highest index the list can have:
li=[1,2,3,4,5]

☐ A

5

☐ B

3

☐ C

2

☐ D

4

13.

```
a = [1,5,3,1,2,4,1]
print(a.count(1))
```

The count() method returns the number of times the specified element appears in the list.

What is the output of this code?

☐ A

0

☐ B

1

☐ C

2

☐ D

3

14.

```
a = [5,1,2,8,7,3,9]
b = len(a)
if b%2==0:
    print('X')
else:
    print('Y')
```

What is the output of this code?

☐ A

Error

☐ B

Y

☐ C

X

15. Which of the following function is used to count the number of elements in a list ?

☐ A

find()

☐ B

count()

☐ C

len()

☐ D

index()

16.

```
mylist = ["a","b"]
mylist[1] = "c"
print(mylist)
```

☐ A

["a","c"]

☐ B

["a","b","c"]

☐ C

mylist

☐ D

["a","b"]

17. What is the output of program below?

```
bicycles = ['trek', 'cannondale', 'redline', 'specialized']  
print(bicycles[-1])
```

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> A specialized | <input type="checkbox"/> B cannondale |
| <input type="checkbox"/> C trek | <input type="checkbox"/> D redline |

18. `a = [2, 5, 8, 1]`
`print("a[2]")`
What is the output above?

- | | |
|------------------------------|---------------------------------|
| <input type="checkbox"/> A 2 | <input type="checkbox"/> B a[2] |
| <input type="checkbox"/> C 8 | <input type="checkbox"/> D 5 |

19. Which of these is the best description of a list in Python?

- | | |
|--|--|
| <input type="checkbox"/> A A list is a collection of data that has an order and can be changed | <input type="checkbox"/> B A list is a lot of variables |
| <input type="checkbox"/> C A list is used for shopping | <input type="checkbox"/> D A list is a collection of data that cannot hold duplicated data and cannot be changed |

20. `var1 = 1`
`var2 = 2`
`var3 = "3"`
`print(var1 + var2 + var3)`

- | | |
|-------------------------------|---|
| <input type="checkbox"/> A 6 | <input type="checkbox"/> B Error. Mixing operators between numbers and strings are not supported. |
| <input type="checkbox"/> C 33 | <input type="checkbox"/> D 123 |

21. What will be the output?
`var1=['sam', "Pam", 12,44]`
`var1[3]="Ram"`
`print(var1)`

- | | |
|---|--|
| <input type="checkbox"/> A ['sam', 'Pam', 'Ram',44] | <input type="checkbox"/> B ['sam', 'Pam', 12, 44] |
| <input type="checkbox"/> C It will give an error | <input type="checkbox"/> D ['sam', 'Pam', 12, 'Ram'] |

22. Which of the statements are true for the code below:

```
list1=["Red","Green","Yellow","Orange","Black"]
```

```
if "Red" in list1 and "Green" in list1 and "Yellow" in list1:  
    print("We have all the colors of traffic lights")
```

- | | | | |
|----------------------------|---------------------------|----------------------------|---|
| <input type="checkbox"/> A | None of these | <input type="checkbox"/> B | Print statement will be executed if the list has all the three colors |
| <input type="checkbox"/> C | It will give syntax error | <input type="checkbox"/> D | Print statement will be executed if the list has red/yellow/Blue |

23. Which statement is correct?

- | | | | |
|----------------------------|---------------------------------------|----------------------------|---------------------------------------|
| <input type="checkbox"/> A | List & Tuple are immutable | <input type="checkbox"/> B | List & Tuple are mutable |
| <input type="checkbox"/> C | List is immutable && Tuple is mutable | <input type="checkbox"/> D | List is mutable && Tuple is immutable |

24. The code snippet above outputs

```
grades = { "Math"      : 4,  
           "Physics"   : 3.8,  
           "Chemistry" : 3.6,  
           "English"   : 3.7}  
  
print ( grades["Zoology"] )
```

- | | | | |
|----------------------------|-------|----------------------------|------|
| <input type="checkbox"/> A | -1 | <input type="checkbox"/> B | None |
| <input type="checkbox"/> C | error | <input type="checkbox"/> D | NaN |

25. The code above prints

```
grades = { "Math"      : 4,  
           "Physics"   : 3.8,  
           "Chemistry" : 3.6,  
           "English"   : 3.7 }  
  
for key in grades :  
    print (key)
```

- | | | | |
|----------------------------|------------------|----------------------------|-----------------------------|
| <input type="checkbox"/> A | NaNNaNNaNNaN | <input type="checkbox"/> B | MathPhysicsChemistryEnglish |
| <input type="checkbox"/> C | NoneNoneNoneNone | <input type="checkbox"/> D | 43.83.63.7 |

26. What is the output of the program above

```
grades = { "Math"      : 4,  
           "Physics"   : 3.8,  
           "Chemistry" : 3.6,  
           "English"   : 3.7 }  
  
list(grades.keys())[2][2]
```

- | | | | |
|----------------------------|---|----------------------------|---|
| <input type="checkbox"/> A | e | <input type="checkbox"/> B | y |
| <input type="checkbox"/> C | t | <input type="checkbox"/> D | g |

27.

```
# dictionary of student id
# and grade in a particular subject
grades = { 103 : 4,
          101 : 3.8,
          102 : 3.6,
          104 : 3.7}

print ( sorted(grades.keys()) )
```

The output of the code above is

A

[3.6, 3.7, 3.8, 4]

B

[101, 102, 103, 104]

28.

```
# dictionary of student id
# and grade in a particular subject
grades = { 103 : 4,
          101 : 3.8,
          102 : 3.6,
          104 : 3.7}

print ( sorted(grades.values()) )
```

What is the output of the code above

A

[101, 102, 103, 104]

B

[3.6, 3.7, 3.8, 4]

29.

```
grades = { 103 : 4,
          101 : 3.8,
          102 : 3.6,
          104 : 3.7}
```

Which of the following code deletes the key 103 and its value

A

```
for key in grades :
    if key == 103 :
        del grades[103]
```

B

grades.pop(103)

C

del grades["103"]

D

grades.pop("103")

E

del grades[103]

30. Square brackets in an assignment statement will create which type of data structure?
(s=[])

A

Set

B

Dictionary

C

List

D

Queue

31. What will be the output of the following Python code?

```
nums = set([1,1,2,3,3,3,4,4])
print(len(nums))
```

A

4

B

7

C

Error, invalid syntax for formation of set

D

8

32. Which of the following statements is used to create an empty set?

A

[]

B

set()

C

()

D

{ }

33. If a={5,6,7}, what happens when a.add(5) is executed?

- | | | | |
|----------------------------|--------------------------------------|----------------------------|---|
| <input type="checkbox"/> A | Error as 5 already exists in the set | <input type="checkbox"/> B | a={5,6,7} |
| <input type="checkbox"/> C | a={5,5,6,7} | <input type="checkbox"/> D | Error as there is no add function for set data type |

34. What will be the output of the following Python code?

```
>>> a={3,4,5}
>>> a.update([1,2,3])
>>> a
```

- | | | | |
|----------------------------|-----------------------------------|----------------------------|--|
| <input type="checkbox"/> A | {1, 2, 3, 4, 5} | <input type="checkbox"/> B | Error, duplicate item present in list |
| <input type="checkbox"/> C | Error, list can't be added to set | <input type="checkbox"/> D | Error, no method called update for set data type |

35. What will be the output of the following Python code?

```
>>> a={1,2,3}
>>> b=a
>>> b.remove(3)
>>> a
```

- | | | | |
|----------------------------|----------------------------------|----------------------------|--------------------------------------|
| <input type="checkbox"/> A | {1,2} | <input type="checkbox"/> B | Error, copying of sets isn't allowed |
| <input type="checkbox"/> C | Error, invalid syntax for remove | <input type="checkbox"/> D | {1,2,3} |

36. What will be the output of the following Python code?

```
s=set()
type(s)
```

- | | | | |
|----------------------------|---------------|----------------------------|---------|
| <input type="checkbox"/> A | <class 'set'> | <input type="checkbox"/> B | <'set'> |
| <input type="checkbox"/> C | class set | <input type="checkbox"/> D | set |

Answer Key

1.a	2.	3.a	4.a
5.a	6.b	7.a	8.d
9.c	10.a	11.c	12.d
13.d	14.b	15.c	16.a
17.a	18.b	19.a	20.b
21.d	22.b	23.d	24.c
25.b	26.a	27.b	28.b
29.	30.c	31.a	32.b
33.b	34.a	35.a	36.a