Python Questions and Answers – Core Datatypes

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “Core Data Types”.

1. Which of these in not a core datatype?

a) Lists

b) Dictionary

c) Tuples

d) Class

View Answer

Answer: d
Explanation: Class is a user defined datatype.

2. Given a function that does not return any value, What value is thrown by default when executed in shell.

a) int

b) bool

c) void

d) None

View Answer

Answer: d
Explanation: Python shell throws a NoneType object back.

3. Following set of commands are executed in shell, what will be the output?

```
>>>str="hello"
>>>str[:2]
>>>
```

a) he

b) lo

c) olleh

d) hello

View Answer

Answer: a
Explanation: We are printing only the 1st two bytes of string and hence the answer is “he”.

4. Which of the following will run without errors ?

a) round(45.8)

b) round(6352.898,2,5)

c) round()

d) round(7463.123,2,1)

View Answer

Answer: a
Explanation: Execute help(round) in the shell to get details of the parameters that are passed into the round function.

5. What is the return type of function id ?

a) int

b) float

c) bool

d) dict

View Answer

Answer: a
Explanation: Execute help(id) to find out details in python shell.id returns a integer value that is unique.

6. In python we do not specify types,it is directly interpreted by the compiler, so consider the following operation to be performed.

```
>>>x = 13 ? 2
```

objective is to make sure x has a integer value, select all that apply (python 3.xx)

a) x = 13 // 2

b) x = int(13 / 2)

c) x = 13 % 2

d) All of the mentioned

View Answer

Answer: d
Explanation: // is integer operation in python 3.0 and int(..) is a type cast operator.

7. What error occurs when you execute?

apple = mango

a) SyntaxError

b) NameError

c) ValueError

d) TypeError

View Answer

Answer: b
Explanation: Mango is not defined hence name error.

8. Carefully observe the code and give the answer.

```
def example(a):
    a = a + '2'
     a = a*2
    return a
>>>example("hello")
```

a) indentation Error

b) cannot perform mathematical operation on strings

c) hello2

d) hello2hello2

View Answer

Answer: a
Explanation: Python codes have to be indented properly.

9. What datype is the object below ?

L = [1, 23, ‘hello’, 1].

a) list

b) dictionary

c) array

d) tuple

View Answer

Answer: a
Explanation: List datatype can store any values within it.

10. In order to store values in terms of key and value we use what core datatype.

a) list

b) tuple

c) class

d) dictionary

View Answer

Answer: d
Explanation: Dictionary stores values in terms of keys and values.

11. Which of the following results in a SyntaxError ?

a) ‘”Once upon a time…”, she said.’

b) “He said, ‘Yes!'”

c) ‘3\’

d) ”’That’s okay”’

View Answer

Answer: c
Explanation: Carefully look at the colons.

12. The following is displayed by a print function call:

```
1. tom
2. dick
3. harry
```

Select all of the function calls that result in this output

a) print(”’tom

\ndick

\nharry”’)

b) print(”’tomdickharry”’)

c) print(‘tom\ndick\nharry’)

d) print(‘tom

dick

harry’)

View Answer

Answer: c
Explanation: The \n adds a new line.

13. What is the average value of the code that is executed below ?

```
>>>grade1 = 80
>>>grade2 = 90
>>>average = (grade1 + grade2) / 2
```

a) 85

b) 85.1

c) 95

d) 95.1

View Answer

Answer: b
Explanation: Cause a decimal value to appear as output.

14. Select all options that print

hello-how-are-you

a) print(‘hello’, ‘how’, ‘are’, ‘you’)

b) print(‘hello’, ‘how’, ‘are’, ‘you’ + ‘-‘ * 4)

c) print(‘hello-‘ + ‘how-are-you’)

d) print(‘hello’ + ‘-‘ + ‘how’ + ‘-‘ + ‘are’ + ‘you’)

View Answer

Answer: c
Explanation: Execute in the shell.

15. What is the return value of trunc() ?

a) int

b) bool

c) float

d) None

View Answer

Answer: a
Explanation: Executle help(math.trunc) to get details.

Python Questions and Answers – Basic Operators

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “Basic Operators”.

1. Which is the correct operator for power(x^y)?

a) X^y

b) X**y

c) X^^y

d) None of the mentioned

View Answer

Answer: b
Explanation: In python, power operator is x**y i.e. 2**3=8.

2. Which one of these is floor division?

a) /

b) //

c) %

d) None of the mentioned

View Answer

Answer: b
Explanation: When both of the operands are integer then python chops out the fraction part and gives you the round off value, to get the accurate answer use floor division. This is floor division. For ex, 5/2 = 2.5 but both of the operands are integer so answer of this expression in python is 2.To get the 2.5 answer, use floor division.

3. What is the order of precedence in python?

i) Parentheses

ii) Exponential

iii) Multiplication

iv) Division

v) Addition

vi) Subtraction

a) i,ii,iii,iv,v,vi

b) ii,i,iii,iv,v,vi

c) ii,i,iv,iii,v,vi

d) i,ii,iii,iv,vi,v

View Answer

Answer: a
Explanation: For order of precedence, just remember this PEMDAS (similar to BODMAS)

4. What is answer of this expression, 22 % 3 is?

a) 7

b) 1

c) 0

d) 5

View Answer

Answer: b
Explanation: Modulus operator gives remainder. So, 22%3 gives the remainder, that is, 1.

5. Mathematical operations can be performed on a string. State whether true or false.

a) True

b) False

View Answer

Answer: b
Explanation: You can’t perform mathematical operation on string even if the string is in the form: ‘1234…’.

6. Operators with the same precedence are evaluated in which manner?

a) Left to Right

b) Right to Left

c) Cant say

d) None of the mentioned

View Answer

Answer: a
Explanation: None.

7. What is the output of this expression, 3*1**3?

a) 27

b) 9

c) 3

d) 1

View Answer

Answer: c
Explanation: First this expression will solve 1**3 because exponential have higher precedence than multiplication, so 1**3 = 1 and 3*1 = 3. Final answer is 3.

8. Which one of the following have the same precedence?

a) Addition and Subtraction

b) Multiplication and Division

c) Both a and b

d) None of the mentioned

View Answer

Answer: c
Explanation: None.

9. The expression Int(x) implies that the variable x is converted to integer. State whether true or false.

a) True

b) False

View Answer

Answer: a
Explanation: None.

10. Which one of the following have the highest precedence in the expression?

a) Exponential

b) Addition

c) Multiplication

d) Parentheses

View Answer

Answer: d
Explanation: Just remember: PEDMAS, that is, Parenthesis, Exponentiation, Division, Multiplication, Addition, Subtraction. Note that the precedence order of Division and Multiplication is the same. Likewise, the order of Addition and Subtraction is also the same.

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3.      a = a*2
4.     return a
5. >>>example("hello")
```

a) indentation Error

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c) hello2

d) hello2hello2

View Answer

Answer: a
Explanation: Python codes have to be indented properly.

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c) class

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View Answer

Answer: d
Explanation: Dictionary stores values in terms of keys and values.

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a) '"Once upon a time…", she said.'

b) "He said, 'Yes!'"

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d) "'That's okay"'

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Answer: c
Explanation: Carefully look at the colons.

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b) print("'tomdickharry"')

c) print('tom\ndick\nharry')

d) print('tom
dick
harry')

View Answer

Answer: c
Explanation: The \n adds a new line.

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1. >>>grade1 = 80
2. >>>grade2 = 90
3. >>>average = (grade1 + grade2) / 2
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c) 95

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View Answer

Answer: b
Explanation: Cause a decimal value to appear as output.

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hello-how-are-you

a) print(‘hello’, ‘how’, ‘are’, ‘you’)

b) print(‘hello’, ‘how’, ‘are’, ‘you’ + ‘-‘ * 4)

c) print(‘hello-‘ + ‘how-are-you’)

d) print(‘hello’ + ‘-‘ + ‘how’ + ‘-‘ + ‘are’ + ‘you’)

View Answer

Answer: c
Explanation: Execute in the shell.

15. What is the return value of trunc() ?

a) int

b) bool

c) float

d) None

View Answer

Answer: a
Explanation: Executle help(math.trunc) to get details.

Python Questions and Answers – While and For Loops – 1

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “While and For Loops”.

1. What is the output of the following?

```
x = ['ab', 'cd']
for i in x:
    i.upper()
print(x)
```

a) [‘ab’, ‘cd’].

b) [‘AB’, ‘CD’].

c) [None, None].

d) none of the mentioned

View Answer

Answer: a
Explanation: The function upper() does not modify a string in place, it returns a new string which isn’t being stored anywhere.

2. What is the output of the following?

```
x = ['ab', 'cd']
for i in x:
    x.append(i.upper())
print(x)
```

a) [‘AB’, ‘CD’].

b) [‘ab’, ‘cd’, ‘AB’, ‘CD’].

c) [‘ab’, ‘cd’].

d) none of the mentioned

View Answer

Answer: d
Explanation: The loop does not terminate as new elements are being added to the list in each iteration.

3. What is the output of the following?

```
i = 1
while True:
    if i%3 == 0:
        break
    print(i)

    i + = 1
```

a) 1 2

b) 1 2 3

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: SyntaxError, there shouldn't be a space between + and = in +=.

4. What is the output of the following?

```
i = 1
while True:
    if i%007 == 0:
        break
    print(i)
    i += 1
```

a) 1 2 3 4 5 6

b) 1 2 3 4 5 6 7

c) error

d) none of the mentioned

View Answer

Answer: a
Explanation: Control exits the loop when i becomes 7.

5. What is the output of the following?

```
i = 5
while True:
    if i%0011 == 0:
        break
    print(i)
    i += 1
```

a) 5 6 7 8 9 10

b) 5 6 7 8

c) 5 6

d) error

View Answer

Answer: b
Explanation: 0O11 is an octal number.

6. What is the output of the following?

```
i = 5
while True:
    if i%009 == 0:
        break
    print(i)
    i += 1
```

a) 5 6 7 8

b) 5 6 7 8 9

c) 5 6 7 8 9 10 11 12 13 14 15 ….

d) error

View Answer

Answer: d
Explanation: 9 isn't allowed in an octal number.

7. What is the output of the following?

```
i = 1
while True:
    if i%2 == 0:
        break
    print(i)
    i += 2
```

a) 1

b) 1 2

c) 1 2 3 4 5 6 …

d) 1 3 5 7 9 11 …

View Answer

Answer: d
Explanation: The loop does not terminate since i is never an even number.

8. What is the output of the following?

```
i = 2
while True:
    if i%3 == 0:
        break
    print(i)
    i += 2
```

a) 2 4 6 8 10 …

b) 2 4

c) 2 3

d) error

View Answer

Answer: b
Explanation: The numbers 2 and 4 are printed. The next value of i is 6 which is divisible by 3 and hence control exits the loop.

9. What is the output of the following?

```
i = 1
while False:
    if i%2 == 0:
        break
    print(i)
    i += 2
```

a) 1

b) 1 3 5 7 …

c) 1 2 3 4 …

d) none of the mentioned

View Answer

Answer: d
Explanation: Control does not enter the loop because of False.

10. What is the output of the following?

```
True = False
while True:
    print(True)
    break
```

a) True

b) False

c) None

d) none of the mentioned

View Answer

Answer: d
Explanation: SyntaxError, True is a keyword and it’s value cannot be changed.

Python Questions and Answers – While and For Loops – 5

This set of Python Questions and Answers for Experienced people focuses on “While and For Loops”.

1. What is the output of the following?

```
for i in range(2.0):
    print(i)
```

a) 0.0 1.0

b) 0 1

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: Object of type float cannot be interpreted as an integer.

2. What is the output of the following?

```
for i in range(int(2.0)):
    print(i)
```

a) 0.0 1.0

b) 0 1

c) error

d) none of the mentioned

View Answer

Answer: b
Explanation: range(int(2.0)) is the same as range(2).

3. What is the output of the following?

```
for i in range(float('inf')):
    print (i)
```

a) 0.0 0.1 0.2 0.3 …

b) 0 1 2 3 …

c) 0.0 1.0 2.0 3.0 …

d) none of the mentioned

View Answer

Answer: d
Explanation: Error, objects of type float cannot be interpreted as an integer.

4. What is the output of the following?

```
for i in range(int(float('inf'))):
    print (i)
```

a) 0.0 0.1 0.2 0.3 …

b) 0 1 2 3 …

c) 0.0 1.0 2.0 3.0 …

d) none of the mentioned

View Answer

Answer: d
Explanation: OverflowError, cannot convert float infinity to integer.

5. What is the output of the following?

```
for i in [1, 2, 3, 4][::-1]:
    print (i)
```

a) 1 2 3 4

b) 4 3 2 1

c) error

d) none of the mentioned

View Answer

Answer: b
Explanation: [::-1] reverses the list.

6. What is the output of the following?

```
for i in ''.join(reversed(list('abcd'))):
    print (i)
```

a) a b c d

b) d c b a

c) error

d) none of the mentioned

View Answer

Answer: b
Explanation: ‘ ‘.join(reversed(list(‘abcd’))) reverses a string.

7. What is the output of the following?

```
for i in 'abcd'[::-1]:
    print (i)
```

a) a b c d

b) d c b a

c) error

d) none of the mentioned

View Answer

Answer: b
Explanation: [::-1] reverses the string.

8. What is the output of the following?

```
for i in '':
    print (i)
```

a) None

b) (nothing is printed)

c) error

d) none of the mentioned

View Answer

Answer: b
Explanation: The string does not have any character to loop over.

9. What is the output of the following?

```
x = 2
for i in range(x):
    x += 1
    print (x)
```

a) 0 1 2 3 4 …

b) 0 1

c) 3 4

d) 0 1 2 3

View Answer

Answer: c
Explanation: Variable x is incremented and printed twice.

10. What is the output of the following?

```
x = 2
for i in range(x):
```

```
    x -= 2
    print (x)
```

a) 0 1 2 3 4 …

b) 0 -2

c) 0

d) error

View Answer

Answer: b
Explanation: The loop is entered twice.

Python Questions and Answers – Tuples – 1

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “Tuples – 1”.

1. Which of the following is a Python tuple?

a) [1, 2, 3].

b) (1, 2, 3)

c) {1, 2, 3}

d) {}

View Answer

Answer: b
Explanation: Tuples are represented with round brackets.

2. Suppose t = (1, 2, 4, 3), which of the following is incorrect?

a) print(t[3])

b) t[3] = 45

c) print(max(t))

d) print(len(t))

View Answer

Answer: b
Explanation: Values cannot be modified in the case of tuple, that is, tuple is immutable.

3. What will be the output?

```
1. >>>t=(1,2,4,3)
2. >>>t[1:3]
```

a) (1, 2)

b) (1, 2, 4)

c) (2, 4)

d) (2, 4, 3)

View Answer

Answer: c
Explanation: Slicing in tuples takes place just as it does in strings.

4. What will be the output?

```
1. >>>t=(1,2,4,3)
2. >>>t[1:-1]
```

a) (1, 2)

b) (1, 2, 4)

c) (2, 4)

d) (2, 4, 3)

View Answer

Answer: c
Explanation: Slicing in tuples takes place just as it does in strings.

5. What will be the output?

```
1. >>>t = (1, 2, 4, 3, 8, 9)
2. >>>[t[i] for i in range(0, len(t), 2)]
```

a) [2, 3, 9].

b) [1, 2, 4, 3, 8, 9].

c) [1, 4, 8].

d) (1, 4, 8)

View Answer

Answer: c
Explanation: Execute in the shell to verify.

6. What will be the output?

```
1. d = {"john":40, "peter":45}
2. d["john"]
```

a) 40

b) 45

c) “john”

d) “peter”

View Answer

Answer: a
Explanation: Execute in the shell to verify.

7. What will be the output?

```
1. >>>t = (1, 2)
2. >>>2 * t
```

a) (1, 2, 1, 2)

b) [1, 2, 1, 2].

c) (1, 1, 2, 2)

d) [1, 1, 2, 2].

View Answer

Answer: a
Explanation: * operator concatenates tuple.

8. What will be the output?

```
1. >>>t1 = (1, 2, 4, 3)
2. >>>t2 = (1, 2, 3, 4)
3. >>>t1 < t2
```

a) True

b) False

c) Error

d) None

View Answer

Answer: b
Explanation: Elements are compared one by one in this case.

9. What will be the output?

```
1. >>>my_tuple = (1, 2, 3, 4)
2. >>>my_tuple.append( (5, 6, 7) )
3. >>>print len(my_tuple)
```

a) 1

b) 2

c) 5

d) Error

View Answer

Answer: d
Explanation: Tuples are immutable and don't have an append method. An exception is thrown in this case.

10. What will be the output?

```
1. numberGames = {}
2. numberGames[(1,2,4)] = 8
3. numberGames[(4,2,1)] = 10
4. numberGames[(1,2)] = 12
5. sum = 0
6. for k in numberGames:
7.     sum += numberGames[k]
8. print len(numberGames) + sum
```

a) 30

b) 24

c) 33

d) 12

View Answer

Answer: c
Explanation: Tuples can be used for keys into dictionary. The tuples can have mixed length and the order of the items in the tuple is considered when comparing the equality of the keys.

Python Questions and Answers – Dictionary – 2

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “Dictionary – 2”.

1. Which of these about a dictionary is false?

a) The values of a dictionary can be accessed using keys

b) The keys of a dictionary can be accessed using values

c) Dictionaries aren’t ordered

d) Dictionaries are mutable

View Answer

Answer: b
Explanation: The values of a dictionary can be accessed using keys but the keys of a dictionary can’t be accessed using values.

2. Which of the following is not a declaration of the dictionary?

a) {1: ‘A’, 2: ‘B’}

b) dict([[1,”A”],[2,”B”]])

c) {1,”A”,2”B”}

d) { }

View Answer

Answer: c
Explanation: Option c is a set, not a dictionary.

3. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
for i,j in a.items():
    print(i,j,end=" ")
```

a) 1 A 2 B 3 C

b) 1 2 3

c) A B C

d) 1:”A” 2:”B” 3:”C”

View Answer

Answer: a
Explanation: In the above code, variables i and j iterate over the keys and values of the dictionary respectively.

4. What is the output of the following piece of code?

```
a={1:"A",2:"B",3:"C"}
print(a.get(1,4))
```

a) 1

b) A

c) 4

d) Invalid syntax for get method

View Answer

Answer: b
Explanation: The get() method returns the value of the key if the key is present in the dictionary and the default value(second parameter) if the key isn't present in the dictionary.

5. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
print(a.get(5,4))
```

a) Error, invalid syntax

b) A

c) 5

d) 4

View Answer

Answer: d
Explanation: The get() method returns the default value(second parameter) if the key isn't present in the dictionary.

6. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
print(a.setdefault(3))
```

a) {1: 'A', 2: 'B', 3: 'C'}

b) C

c) {1: 3, 2: 3, 3: 3}

d) No method called setdefault() exists for dictionary

View Answer

Answer: b
Explanation: setdefault() is similar to get() but will set dict[key]=default if key is not already in the dictionary.

7. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
a.setdefault(4,"D")
print(a)
```

a) {1: 'A', 2: 'B', 3: 'C', 4: 'D'}.

b) None.

c) Error.

d) [1,3,6,10].

View Answer

Answer: a
Explanation: setdefault() will set dict[key]=default if key is not already in the dictionary.

8. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
b={4:"D",5:"E"}
a.update(b)
print(a)
```

a) {1: ‘A’, 2: ‘B’, 3: ‘C’}

b) Method update() doesn’t exist for dictionaries

c) {1: ‘A’, 2: ‘B’, 3: ‘C’, 4: ‘D’, 5: ‘E’}

d) {4: ‘D’, 5: ‘E’}

View Answer

Answer: c
Explanation: update() method adds dictionary b’s key-value pairs to dictionary a. Execute in python shell to verify.

9. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
b=a.copy()
b[2]="D"
print(a)
```

a) Error, copy() method doesn’t exist for dictionaries

b) {1: ‘A’, 2: ‘B’, 3: ‘C’}

c) {1: ‘A’, 2: ‘D’, 3: ‘C’}

d) “None” is printed

View Answer

Answer: b
Explanation: Changes made in the copy of the dictionary isn’t reflected in the original one.

10. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
a.clear()
print(a)
```

a) None

b) { None:None, None:None, None:None}

c) {1:None, 2:None, 3:None}

d) { }

View Answer

Answer: d
Explanation: The clear() method clears all the key-value pairs in the dictionary.

11. Which of the following isn't true about dictionary keys?

a) More than one key isn't allowed

b) Keys must be immutable

c) Keys must be integers

d) When duplicate keys encountered, the last assignment wins

View Answer

Answer: c
Explanation: Keys of a dictionary may be any data type that is immutable.

12. What is the output of the following code?

```
a={1:5,2:3,3:4}
a.pop(3)
print(a)
```

a) {1: 5}

b) {1: 5, 2: 3}

c) Error, syntax error for pop() method

d) {1: 5, 3: 4}

View Answer

Answer: b
Explanation: pop() method removes the key-value pair for the key mentioned in the pop() method.

13. What is the output of the following code?

```
a={1:5,2:3,3:4}
print(a.pop(4,9))
```

a) 9

b) 3

c) Too many arguments for pop() method

d) 4

View Answer

Answer: a
Explanation: pop() method returns the value when the key is passed as an argument and otherwise returns the default value(second argument) if the key isn't present in the dictionary.

14. What is the output of the following code?

```
a={1:"A",2:"B",3:"C"}
for i in a:
    print(i,end=" ")
```

a) 1 2 3

b) 'A' 'B' 'C'

c) 1 'A' 2 'B' 3 'C'

d) Error, it should be: for i in a.items():

View Answer

Answer: a
Explanation: The variable i iterates over the keys of the dictionary and hence the keys are printed.

15. Execute the following in Python shell?

```
>>> a={1:"A",2:"B",3:"C"}
>>> a.items()
```

a) Syntax error

b) dict_items([(‘A’), (‘B’), (‘C’)])

c) dict_items([(1,2,3)])

d) dict_items([(1, ‘A’), (2, ‘B’), (3, ‘C’)])

View Answer

Answer: d
Explanation: The method items() returns list of tuples with each tuple having a key-value pair.

Python Questions and Answers – Function – 1

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “Function – 1”.

1. Which of the following is the use of function in python?

a) Functions are reusable pieces of programs

b) Functions don’t provide better modularity for your application

c) you can’t also create your own functions

d) All of the mentioned

View Answer

Answer: a
Explanation: Functions are reusable pieces of programs. They allow you to give a name to a block of statements, allowing you to run that block using the specified name anywhere in your program and any number of times.

2. Which keyword is use for function?

a) Fun

b) Define

c) Def

d) Function

View Answer

Answer: c
Explanation: None.

3. What is the output of the below program?

```
def sayHello():
    print('Hello World!')
sayHello()
sayHello()
```

a) Hello World!

Hello World!

b) ‘Hello World!’

‘Hello World!’

c) Hello

Hello

d) None of the mentioned

View Answer

Answer: a
Explanation: Functions are defined using the def keyword. After this keyword comes an identifier name for the function, followed by a pair of parentheses which may enclose some names of variables, and by the final colon that ends the line. Next follows the block of statements that are part of this function.

```
def sayHello():
    print('Hello World!') # block belonging to the function
# End of function #

sayHello() # call the function
sayHello() # call the function again
```

4. What is the output of the below program?

```
def printMax(a, b):
    if a > b:
        print(a, 'is maximum')
    elif a == b:
        print(a, 'is equal to', b)
    else:
        print(b, 'is maximum')
printMax(3, 4)
```

a) 3

b) 4

c) 4 is maximum

d) None of the mentioned

View Answer

Answer: c
Explanation: Here, we define a function called printMax that uses two parameters called a and b. We find out the greater number using a simple if..else statement and then print the bigger number.

5. What is the output of the below program ?

```
x = 50
def func(x):
    print('x is', x)
    x = 2
    print('Changed local x to', x)
func(x)
print('x is now', x)
```

a) x is now 50

b) x is now 2

c) x is now 100

d) None of the mentioned

View Answer

Answer: a
Explanation: The first time that we print the value of the name x with the first line in the function's body, Python uses the value of the parameter declared in the main block, above the function definition.
Next, we assign the value 2 to x. The name x is local to our function. So, when we change the value of x in the function, the x defined in the main block remains unaffected.
With the last print function call, we display the value of x as defined in the main block, thereby confirming that it is actually unaffected by the local assignment within the previously called function.

6. What is the output of the below program?

```
x = 50
def func():
    global x
    print('x is', x)
    x = 2
    print('Changed global x to', x)
func()
print('Value of x is', x)
```

a) x is 50

Changed global x to 2

Value of x is 50

b) x is 50

Changed global x to 2

Value of x is 2

c) x is 50

Changed global x to 50

Value of x is 50

d) None of the mentioned

View Answer

Answer: b
Explanation: The global statement is used to declare that x is a global variable – hence, when we assign a value to x inside the function, that change is reflected when we use the value of x in the main block.

7. What is the output of below program?

```
def say(message, times = 1):
    print(message * times)
say('Hello')
say('World', 5)
```

a) Hello

WorldWorldWorldWorldWorld

b) Hello

World 5

c) Hello

World,World,World,World,World

d) Hello

HelloHelloHelloHelloHello

View Answer

Answer: a
Explanation: For some functions, you may want to make some parameters optional and use default values in case the user does not want to provide values for them. This is done with the help of default argument values. You can specify default argument values for parameters by appending to the parameter name in the function definition the assignment operator (=) followed by the default value.
The function named say is used to print a string as many times as specified. If we don't supply a value, then by default, the string is printed just once. We achieve this by specifying a default argument value of 1 to the parameter times.
In the first usage of say, we supply only the string and it prints the string once. In the second usage of say, we supply both the string and an argument 5 stating that we want to say the string message 5 times.

8. What is the output of the below program?

```
def func(a, b=5, c=10):
    print('a is', a, 'and b is', b, 'and c is', c)

func(3, 7)
func(25, c = 24)
func(c = 50, a = 100)
```

a) a is 7 and b is 3 and c is 10

a is 25 and b is 5 and c is 24

a is 5 and b is 100 and c is 50

b) a is 3 and b is 7 and c is 10

a is 5 and b is 25 and c is 24

a is 50 and b is 100 and c is 5

c) a is 3 and b is 7 and c is 10

a is 25 and b is 5 and c is 24

a is 100 and b is 5 and c is 50

d) None of the mentioned

View Answer

Answer: c
Explanation: If you have some functions with many parameters and you want to specify only some of them, then you can give values for such parameters by naming them – this is called keyword arguments – we use the name (keyword) instead of the position (which we have been using all along) to specify the arguments to the function.
The function named func has one parameter without a default argument value, followed by two parameters with default argument values.

In the first usage, func(3, 7), the parameter a gets the value 3, the parameter b gets the value 7 and c gets the default value of 10.

In the second usage func(25, c=24), the variable a gets the value of 25 due to the position of the argument. Then, the parameter c gets the value of 24 due to naming i.e. keyword arguments. The variable b gets the default value of 5.

In the third usage func(c=50, a=100), we use keyword arguments for all specified values. Notice that we are specifying the value for parameter c before that for a even though a is defined before c in the function definition.

9. What is the output of below program?

```
def maximum(x, y):
    if x > y:
        return x
    elif x == y:
        return 'The numbers are equal'
    else:
        return y

print(maximum(2, 3))
```

a) 2

b) 3

c) The numbers are equal

d) None of the mentioned

View Answer

Answer: b
Explanation: The maximum function returns the maximum of the parameters, in this case the numbers supplied to the function. It uses a simple if..else statement to find the greater value and then returns that value.

10. Which of the following is a features of DocString?

a) Provide a convenient way of associating documentation with Python modules, functions, classes, and methods

b) All functions should have a docstring

c) Docstrings can be accessed by the __doc__ attribute on objects

d) All of the mentioned

View Answer

Answer: d
Explanation: Python has a nifty feature called documentation strings, usually referred to by its shorter name docstrings. DocStrings are an important tool that you should make use of since it helps to document the program better and makes it easier to understand.

Python Questions and Answers – Argument Parsing 2

This set of Tricky Python Questions & Answers focuses on “Argument Parsing”.

1. What is the output of the following code?

```
def foo(k):
    k = [1]
q = [0]
foo(q)
print(q)
```

a) [0].

b) [1].

c) [1, 0].

d) [0, 1].

View Answer

Answer: a
Explanation: A new list object is created in the function and the reference is lost. This can be checked by comparing the id of k before and after k = [1].

2. How are variable length arguments specified in the function heading?

a) one star followed by a valid identifier

b) one underscore followed by a valid identifier

c) two stars followed by a valid identifier

d) two underscores followed by a valid identifier

View Answer

Answer: a
Explanation: Refer documentation.

3. Which module in the python standard library parses options received from the command line?

a) getopt

b) os

c) getarg

d) main

View Answer

Answer: a
Explanation: getopt parses options received from the command line.

4. What is the type of sys.argv?

a) set

b) list

c) tuple

d) string

View Answer

Answer: b
Explanation: It is a list of elements.

5. What is the value stored in sys.argv[0]?

a) null

b) you cannot access it

c) the program’s name

d) the first argument

View Answer

Answer: c
Explanation: Refer documentation.

6. How are default arguments specified in the function heading?

a) identifier followed by an equal to sign and the default value

b) identifier followed by the default value within back-ticks (“)

c) identifier followed by the default value within square brackets ([])

d) identifier

View Answer

Answer: a
Explanation: Refer documentation.

7. How are required arguments specified in the function heading?

a) identifier followed by an equal to sign and the default value

b) identifier followed by the default value within back-ticks (“)

c) identifier followed by the default value within square brackets ([])

d) identifier

View Answer

Answer: d
Explanation: Refer documentation.

8. What is the output of the following code?

```
def foo(x):
    x[0] = ['def']
    x[1] = ['abc']
    return id(x)
q = ['abc', 'def']
print(id(q) == foo(q))
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: The same object is modified in the function.

9. Where are the arguments received from the command line stored?

a) sys.argv

b) os.argv

c) argv

d) none of the mentioned

View Answer

Answer: a
Explanation: Refer documentation.

10. What is the output of the following?

```
def foo(i, x=[]):
    x.append(x.append(i))
    return x
for i in range(3):
    y = foo(i)
print(y)
```

a) [[[0]], [[[0]], [1]], [[[0]], [[[0]], [1]], [2]]].

b) [[0], [[0], 1], [[0], [[0], 1], 2]].

c) [0, None, 1, None, 2, None].

d) [[[0]], [[[0]], [1]], [[[0]], [[[0]], [1]], [2]]].

View Answer

Answer: c
Explanation: append() returns None.

Python Questions and Answers – Files – 1

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “files”.

1. To open a file c:\scores.txt for reading, we use

a) infile = open(“c:\scores.txt”, “r”)

b) infile = open(“c:\\scores.txt”, “r”)

c) infile = open(file = “c:\scores.txt”, “r”)

d) infile = open(file = “c:\\scores.txt”, “r”)

View Answer

Answer: b
Explanation: Execute help(open) to get more details.

2. To open a file c:\scores.txt for writing, we use

a) outfile = open(“c:\scores.txt”, “w”)

b) outfile = open(“c:\\scores.txt”, “w”)

c) outfile = open(file = “c:\scores.txt”, “w”)

d) outfile = open(file = “c:\\scores.txt”, “w”)

View Answer

Answer: b
Explanation: w is used to indicate that file is to be written to.

3. To open a file c:\scores.txt for appending data, we use

a) outfile = open(“c:\\scores.txt”, “a”)

b) outfile = open(“c:\\scores.txt”, “rw”)

c) outfile = open(file = “c:\scores.txt”, “w”)

d) outfile = open(file = “c:\\scores.txt”, “w”)

View Answer

Answer: a
Explanation: a is used to indicate that data is to be apended.

4. Which of the following statements are true?

a) When you open a file for reading, if the file does not exist, an error occurs

b) When you open a file for writing, if the file does not exist, a new file is created

c) When you open a file for writing, if the file exists, the existing file is overwritten with the new file

d) All of the mentioned

View Answer

Answer: d
Explanation: The program will throw an error.

5. To read two characters from a file object infile, we use

a) infile.read(2)

b) infile.read()

c) infile.readline()

d) infile.readlines()

View Answer

Answer: a
Explanation: Execute in the shell to verify.

6. To read the entire remaining contents of the file as a string from a file object infile, we use

a) infile.read(2)

b) infile.read()

c) infile.readline()

d) infile.readlines()

View Answer

Answer: b
Explanation: read function is used to read all the lines in a file.

7. What is the output?

```
1. f = None
2. for i in range (5):
3.     with open("data.txt", "w") as f:
4.         if i > 2:
5.             break
6. print(f.closed)
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: The WITH statement when used with open file guarantees that the file object is closed when the with block exits.

8. To read the next line of the file from a file object infile, we use

a) infile.read(2)

b) infile.read()

c) infile.readline()

d) infile.readlines()

View Answer

Answer: c
Explanation: Execute in the shell to verify.

9. To read the remaining lines of the file from a file object infile, we use

a) infile.read(2)

b) infile.read()

C) infile.readline()

d) infile.readlines()

View Answer

Answer: d
Explanation: Execute in the shell to verify.

10. The readlines() method returns

a) str

b) a list of lines

c) a list of single characters

d) a list of integers

View Answer

Answer: b
Explanation: Every line is stored in a list and returned.

Python Questions and Answers – Classes and Objects – 1

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “Classes and Objects – 1”.

1. _____ represents an entity in the real world with its identity and behaviour.

a) A method

b) An object

c) A class

d) An operator

View Answer

Answer: b
Explanation: An object represents an entity in the real world that can be distinctly identified. A class may define an object.

2. _____ is used to create an object.

a) class

b) constructor

c) User-defined functions

d) In-built functions

View Answer

Answer: b
Explanation: The values assigned by the constructor to the class members is used to create the object.

3. What is the output of the following code?

```
class test:
     def __init__(self,a="Hello World"):
         self.a=a

     def display(self):
         print(self.a)
```

```
obj=test()
obj.display()
```

a) The program has an error because constructor can’t have default arguments

b) Nothing is displayed

c) “Hello World” is displayed

d) The program has an error display function doesn’t have parameters

View Answer

Answer: c
Explanation: The program has no error. “Hello World” is displayed. Execute in python shell to verify.

4. What is setattr() used for?

a) To access the attribute of the object

b) To set an attribute

c) To check if an attribute exists or not

d) To delete an attribute

View Answer

Answer: b
Explanation: setattr(obj,name,value) is used to set an attribute. If attribute doesn’t exist, then it would be created.

5. What is getattr() used for?

a) To access the attribute of the object

b) To delete an attribute

c) To check if an attribute exists or not

d) To set an attribute

View Answer

Answer: a
Explanation: getattr(obj,name) is used to get the attribute of an object.

6. What is the output of the following code?

```
class change:
    def __init__(self, x, y, z):
        self.a = x + y + z

x = change(1,2,3)
y = getattr(x, 'a')
setattr(x, 'a', y+1)
print(x.a)
```

a) 6

b) 7

c) Error

d) 0

View Answer

Answer: b
Explanation: First, a=1+2+3=6. Then, after setattr() is invoked, x.a=6+1=7.

7. What is the output of the following code?

```
 class test:
     def __init__(self,a):
         self.a=a

     def display(self):
         print(self.a)
obj=test()
obj.display()
```

a) Runs normally, doesn't display anything

b) Displays 0, which is the automatic default value

c) Error as one argument is required while creating the object

d) Error as display function requires additional argument

View Answer

Answer: c
Explanation: Since, the __init__ special method has another argument a other than self, during object creation, one argument is required. For example: obj=test("Hello")

8. Is the following piece of code correct?

```
>>> class A:
        def __init__(self,b):
                self.b=b
        def display(self):
                print(self.b)
>>> obj=A("Hello")
>>> del obj
```

a) True

b) False

View Answer

Answer: a
Explanation: It is possible to delete an object of the class. On further typing obj in the python shell, it throws an error because the defined object has now been deleted.

9. What is the output of the following code?

```
class test:
    def __init__(self):
        self.variable = 'Old'
        self.Change(self.variable)
    def Change(self, var):
        var = 'New'
obj=test()
print(obj.variable)
```

a) Error because function change can't be called in the __init__ function

b) 'New' is printed

c) 'Old' is printed

d) Nothing is printed

View Answer

Answer: c
Explanation: This is because strings are immutable. Hence any change made isn't reflected in the original string.

10. What is Instantiation in terms of OOP terminology?

a) Deleting an instance of class

b) Modifying an instance of class

c) Copying an instance of class

d) Creating an instance of class

View Answer

Answer: d
Explanation: Instantiation refers to creating an object/instance for a class.

11. What is the output of the following code?

```
class fruits:
    def __init__(self, price):
        self.price = price
obj=fruits(50)

obj.quantity=10
obj.bags=2

print(obj.quantity+len(obj.__dict__))
```

a) 12

b) 52

c) 13

d) 60

View Answer

Answer: c
Explanation: In the above code, obj.quantity has been initialised to 10. There are a total of three items in the dictionary, price, quantity and bags. Hence, len(obj.__dict__) is 3.

12. What is the output of the following code?

```
 class Demo:
    def __init__(self):
        pass

    def test(self):
        print(__name__)

obj = Demo()
obj.test()
```

a) Exception is thrown

b) __main__

c) Demo

d) test

View Answer

Answer: b
Explanation: Since the above code is being run not as a result of an import from another module, the variable will have value “__main__”.

Python Questions and Answers – Inheritance – 2

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “Inheritance – 2”.

1. What type of inheritance is illustrated in the following piece of code?

```
class A():
    pass
class B(A):
    pass
class C(B):
    pass
```

a) Multi-level inheritance

b) Multiple inheritance

c) Hierarchical inheritance

d) Single-level inheritance

View Answer

Answer: a
Explanation: In multi-level inheritance, a subclass derives from another class which itself is derived from another class.

2. What does single-level inheritance mean?

a) A subclass derives from a class which in turn derives from another class

b) A single superclass inherits from multiple subclasses

c) A single subclass derives from a single superclass

d) Multiple base classes inherit a single derived class

View Answer

Answer: c
Explanation: In single-level inheritance, there is a single subclass which inherits from a single superclass. So the class definition of the subclass will be: class B(A): where A is the superclass.

3. What is the output of the following piece of code?

```
class A:
     def __init__(self):
         self.__i = 1
         self.j = 5

     def display(self):
```

```
        print(self.__i, self.j)
class B(A):
     def __init__(self):
         super().__init__()
         self.__i = 2
         self.j = 7
c = B()
c.display()
```

a) 2 7

b) 1 5

c) 1 7

d) 2 5

View Answer

Answer: c
Explanation: Any change made in variable i isn't reflected as it is the private member of the superclass.

4. Which of the following statements isn't true?

a) A non-private method in a superclass can be overridden

b) A derived class is a subset of superclass

c) The value of a private variable in the superclass can be changed in the subclass

d) When invoking the constructor from a subclass, the constructor of superclass is automatically invoked

View Answer

Answer: c
Explanation: If the value of a private variable in a superclass is changed in the subclass, the change isn't reflected.

5. What is the output of the following piece of code?

```
class A:
    def __init__(self,x):
        self.x = x
    def count(self,x):
        self.x = self.x+1
class B(A):
    def __init__(self, y=0):
        A.__init__(self, 3)
        self.y = y
    def count(self):
        self.y += 1
def main():
    obj = B()
    obj.count()
    print(obj.x, obj.y)
main()
```

a) 3 0

b) 3 1

c) 0 1

d) An exception in thrown

View Answer

Answer: b
Explanation: Initially x=3 and y=0. When obj.count() is called, y=1.

6. What is the output of the following piece of code when executed in the Python shell?

```
>>> class A:
        pass
>>> class B(A):
        pass
>>> obj=B()
>>> isinstance(obj,A)
```

a) True

b) False

c) Wrong syntax for isinstance() method

d) Invalid method for classes

View Answer

Answer: a
Explanation: isinstance(obj,class) returns True if obj is an object class.

7. Which of the following statements is true?

a) The __new__() method automatically invokes the __init__ method

b) The __init__ method is defined in the object class

c) The __eq(other) method is defined in the object class

d) The __repr__() method is defined in the object class

View Answer

Answer: c
Explanation: The __eq(other) method is called if any comparison takes place and it is defined in the object class.

8. Method issubclass() checks if a class is a subclass of another class. True or False?

a) True

b) False

View Answer

Answer: a
Explanation: Method issubclass() returns True if a class is a subclass of another class and False otherwise.

9. What is the output of the following piece of code?

```
class A:
    def __init__(self):
        self.__x = 1
class B(A):
    def display(self):
        print(self.__x)
```

```
def main():
    obj = B()
    obj.display()
main()
```

a) 1

b) 0

c) Error, invalid syntax for object declaration

d) Error, private class member can’t be accessed in a subclass

View Answer

Answer: d
Explanation: Private class members in the superclass can’t be accessed in the subclass.

10. What is the output of the following piece of code?

```
class A:
    def __init__(self):
        self._x = 5
class B(A):
    def display(self):
        print(self._x)
def main():
    obj = B()
    obj.display()
main()
```

a) Error, invalid syntax for object declaration

b) Nothing is printed

c) 5

d) Error, private class member can’t be accessed in a subclass

View Answer

Answer: c
Explanation: The class member x is protected, not private and hence can be accessed by subclasses.

11. What is the output of the following piece of code?

```
class A:
    def __init__(self,x=3):
        self._x = x
class B(A):
    def __init__(self):
        super().__init__(5)
    def display(self):
        print(self._x)
def main():
    obj = B()
    obj.display()

main()
```

a) 5

b) Error, class member x has two values

c) 3

d) Error, protected class member can’t be accessed in a subclass

View Answer

Answer: a
Explanation: The super() method re-assigns the variable x with value 5. Hence 5 is printed.

12. What is the output of the following piece of code?

```
class A:
    def test1(self):
        print(" test of A called ")
class B(A):
    def test(self):
        print(" test of B called ")
class C(A):
    def test(self):
        print(" test of C called ")
class D(B,C):
    def test2(self):
        print(" test of D called ")
obj=D()
obj.test()
```

a) test of B called

test of C called

b) test of C called

test of B called

c) test of B called

d) Error, both the classes from which D derives has same method test()

View Answer

Answer: c
Explanation: Execute in Python shell to verify. If class D(B,C): is switched is class D(C,B): test of C is called.

13. What is the output of the following piece of code?

```
class A:
    def test(self):
        print("test of A called")
class B(A):
    def test(self):
        print("test of B called")
        super().test()
class C(A):
    def test(self):
        print("test of C called")
        super().test()
class D(B,C):
    def test2(self):
        print("test of D called")
obj=D()
obj.test()
```

a) test of B called

test of C called

test of A called

b) test of C called

test of B called

c) test of B called

test of C called

d) Error, all the three classes from which D derives has same method test()

View Answer

Answer: a
Explanation: Since the invoking method, super().test() is called in the subclasses, all the three methods of test() in three different classes is called.

Python Questions and Answers – Exception Handling – 2

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on “Exception Handling – 2”.

1. The code shown below will result in an error if the input value is entered as -5. State whether this statement is true or false.

```
assert False, 'Spanish'
```

a) True

b) False

View Answer

Answer: a
Explanation: The code shown above results in an assertion error. The output of the code is:
Traceback (most recent call last):
File “ “, line 1, in
assert False, ‘Spanish’
AssertionError: Spanish
Hence, this statement is true.

2. What is the output of the code shown below?

```
x=10
y=8
assert x>y, 'X too small'
```

a) Assertion Error

b) 10 8

c) No output

d) 108

View Answer

Answer: c
Explanation: The code shown above results in an error if and only if xy, there is no error. Since there is no print statement, hence there is no output.

3. What is the output of the code shown below?

```
#generator
def f(x):
    yield x+1
g=f(8)
print(next(g))
```

a) 8

b) 9

c) 7

d) Error

View Answer

Answer: b
Explanation: The code shown above returns the value of the expression x+1, since we have used to keyword yield. The value of x is 8. Hence the output of the code is 9.

4. What is the output of the code shown below?

```
def f(x):
    yield x+1
    print("test")
    yield x+2
g=f(9)
```

a) Error

b) test

c) test

10

12

d) No output

View Answer

Answer: d
Explanation: The code shown above will not yield any output. This is because when we try to yield 9, and there is no next(g), the iteration stops. Hence there is no output.

5. What is the output of the code shown below?

```
def f(x):
    yield x+1
    print("test")
    yield x+2
g=f(10)
print(next(g))
print(next(g))
```

a) No output

b) 11

test

12

c) 11

test

d) 11

View Answer

Answer: b
Explanation: The code shown above results in the output:
11
test
12
This is because we have used next(g) twice. Had we not used next, there would be no output.

6. What is the output of the following code?

```
def a():
    try:
        f(x, 4)
    finally:
        print('after f')
    print('after f?')
a()
```

a) No output

b) after f?

c) error

d) after f

View Answer

Answer: c
Explanation: This code shown above will result in an error simply because ‘f’ is not defined. ‘try’ and ‘finally’ are keywords used in exception handling.

7. What is the output of the code shown?

```
def f(x):
    for i in range(5):
        yield i
g=f(8)
print(list(g))
```

a) [0, 1, 2, 3, 4]

b) [1, 2, 3, 4, 5, 6, 7, 8]

c) [1, 2, 3, 4, 5]

d) [0, 1, 2, 3, 4, 5, 6, 7]

View Answer

Answer: a
Explanation: The output of the code shown above is a list containing whole numbers in the range (5). Hence the output of this code is: [0, 1, 2, 3, 4].

8. The error displayed in the code shown below is:

```
import itertools
l1=(1, 2, 3)
l2=[4, 5, 6]
l=itertools.chain(l1, l2)
print(next(l1))
```

a) ‘list’ object is not iterator

b) ‘tuple’ object is not iterator

c) ‘list’ object is iterator

d) ‘tuple’ object is iterator

View Answer

Answer: b
Explanation: The error raised in the code shown above is that: ‘tuple’ object is not iterator. Had we given l2 as argument to next, the error would have been: ‘list’ object is not iterator.

9. Which of the following is not an exception handling keyword in Python?

a) try

b) except

c) accept

d) finally

View Answer

Answer: c
Explanation: The keywords ‘try’, ‘except’ and ‘finally’ are exception handling keywords in python whereas the word ‘accept’ is not a keyword at all.

10. What is the output of the code shown below?

```
g = (i for i in range(5))
type(g)
```

a) class <’loop’>

b) class <‘iteration’>

c) class <’range’>

d) class <’generator’>

View Answer

Answer: d
Explanation: Another way of creating a generator is to use parenthesis. Hence the output of the code shown above is: class<’generator’>.

Python Questions and Answers – Strings – 6

This set of Python Quiz focuses on “Strings”.

1. What is the output of the following?

```
print("xyyzxyzxzxyy".count('yy'))
```

a) 2

b) 0

c) error

d) none of the mentioned

View Answer

Answer: a
Explanation: Counts the number of times the substring ‘yy’ is present in the given string.

2. What is the output of the following?

```
print("xyyzxyzxzxyy".count('yy', 1))
```

a) 2

b) 0

c) 1

d) none of the mentioned

View Answer

Answer: a
Explanation: Counts the number of times the substring ‘yy’ is present in the given string, starting from position 1.

3. What is the output of the following?

```
print("xyyzxyzxzxyy".count('yy', 2))
```

a) 2

b) 0

c) 1

d) none of the mentioned

View Answer

Answer: c
Explanation: Counts the number of times the sub-string ‘yy’ is present in the given string, starting from position 2.

4. What is the output of the following?

```
print("xyyzxyzxzxyy".count('xyy', 0, 100))
```

a) 2

b) 0

c) 1

d) error

View Answer

Answer: a
Explanation: An error will not occur if the end value is greater than the length of the string itself.

5. What is the output of the following?

```
print("xyyzxyzxzxyy".count('xyy', 2, 11))
```

a) 2

b) 0

c) 1

d) error

View Answer

Answer: b
Explanation: Counts the number of times the sub-string ‘xyy’ is present in the given string, starting from position 2 and ending at position 11.

6. What is the output of the following?

```
print("xyyzxyzxzxyy".count('xyy', -10, -1))
```

a) 2

b) 0

c) 1

d) error

View Answer

Answer: b
Explanation: Counts the number of times the substring ‘xyy’ is present in the given string, starting from position 2 and ending at position 11.

7. What is the output of the following?

```
print('abc'.encode())
```

a) abc

b) ‘abc’

c) b’abc’

d) h’abc’

View Answer

Answer: c
Explanation: A bytes object is returned by encode.

8. What is the default value of encoding in encode()?

a) ascii

b) qwerty

c) utf-8

d) utf-16

View Answer

Answer: c
Explanation: The default value of encoding is utf-8.

9. What is the output of the following?

```
print("xyyzxyzxzxyy".endswith("xyy"))
```

a) 1

b) True

c) 3

d) 2

View Answer

Answer: b
Explanation: The function returns True if the given string ends with the specified sub-string.

10. What is the output of the following?

```
print("xyyzxyzxzxyy".endswith("xyy", 0, 2))
```

a) 0

b) 1

c) True

d) False

View Answer

Answer: d
Explanation: The function returns False if the given string does not end with the specified sub-string.