Python Questions and Answers – Variable Names

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

1. Is Python case sensitive when dealing with identifiers?

a) yes

b) no

c) machine dependent

d) none of the mentioned

View Answer

Answer: a
Explanation: Case is always significant.

2. What is the maximum possible length of an identifier?

a) 31 characters

b) 63 characters

c) 79 characters

d) none of the mentioned

View Answer

Answer: d
Explanation: Identifiers can be of any length.

3. Which of the following is invalid?

a) _a = 1

b) __a = 1

c) __str__ = 1

d) none of the mentioned

View Answer

Answer: d
Explanation: All the statements will execute successfully but at the cost of reduced readability.

4. Which of the following is an invalid variable?

a) my_string_1

b) 1st_string

c) foo

d) _

View Answer

Answer: b
Explanation: Variable names should not start with a number.

5. Why are local variable names beginning with an underscore discouraged?

a) they are used to indicate a private variables of a class

b) they confuse the interpreter

c) they are used to indicate global variables

d) they slow down execution

View Answer

Answer: a
Explanation: As Python has no concept of private variables, leading underscores are used to indicate variables that must not be accessed from outside the class.

6. Which of the following is not a keyword?

a) eval

b) assert

c) nonlocal

d) pass

View Answer

Answer: a
Explanation: eval can be used as a variable.

7. All keywords in Python are in

a) lower case

b) UPPER CASE

c) Capitalized

d) None of the mentioned

View Answer

Answer: d
Explanation: True, False and None are capitalized while the others are in lower case.

8. Which of the following is true for variable names in Python?

a) unlimited length

b) all private members must have leading and trailing underscores

c) underscore and ampersand are the only two special characters allowed

d) none of the mentioned

View Answer

Answer: a
Explanation: Variable names can be of any length.

9. Which of the following is an invalid statement?

a) abc = 1,000,000

b) a b c = 1000 2000 3000

c) a,b,c = 1000, 2000, 3000

d) a_b_c = 1,000,000

View Answer

Answer: b
Explanation: Spaces are not allowed in variable names.

10. Which of the following cannot be a variable?

a) __init__

b) in

c) it

d) on

View Answer

Answer: b
Explanation: in is a keyword.

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

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 dataype 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:

```
tom
dick
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

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 – Numeric Types

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

1. What is the output of print 0.1 + 0.2 == 0.3?

a) True

b) False

c) Machine dependent

d) Error

View Answer

Answer: b
Explanation: Neither of 0.1, 0.2 and 0.3 can be represented accurately in binary. The round off errors from 0.1 and 0.2 accumulate and hence there is a difference of 5.5511e-17 between (0.1 + 0.2) and 0.3.

2. Which of the following is not a complex number?

a) k = 2 + 3j

b) k = complex(2, 3)

c) k = 2 + 3l

d) k = 2 + 3J

View Answer

Answer: c
Explanation: l (or L) stands for long.

3. What is the type of inf?

a) Boolean

b) Integer

c) Float

d) Complex

View Answer

Answer: c
Explanation: Infinity is a special case of floating point numbers. It can be obtained by float('inf').

4. What does ~4 evaluate to?

a) -5

b) -4

c) -3

d) +3

View Answer

Answer: a
Explanation: ~x is equivalent to -(x+1).

5. What does ~~~~~~5 evaluate to?

a) +5

b) -11

c) +11

d) -5

View Answer

Answer: a
Explanation: ~x is equivalent to -(x+1).

6. Which of the following is incorrect?

a) x = 0b101

b) x = 0x4f5

c) x = 19023

d) x = 03964

View Answer

Answer: d
Explanation: Numbers starting with a 0 are octal numbers but 9 isn’t allowed in octal numbers.

7. What is the result of cmp(3, 1)?

a) 1

b) 0

c) True

d) False

View Answer

Answer: a
Explanation: cmp(x, y) returns 1 if x > y, 0 if x == y and -1 if x < y.

8. Which of the following is incorrect?

a) float(‘inf’)

b) float(‘nan’)

c) float(’56’+’78’)

d) float(’12+34′)

View Answer

Answer: d
Explanation: ‘+’ cannot be converted to a float.

9. What is the result of round(0.5) – round(-0.5)?

a) 1.0

b) 2.0

c) 0.0

d) None of the mentioned

View Answer

Answer: b
Explanation: Python rounds off numbers away from 0 when the number to be rounded off is exactly halfway through. round(0.5) is 1 and round(-0.5) is -1.

10. What does 3 ^ 4 evaluate to?

a) 81

b) 12

c) 0.75

d) 7

View Answer

Answer: d
Explanation: ^ is the Binary XOR operator.

Python Questions and Answers – Precedence and Associativity – 1

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on "Precedence and Associativity – 1".

1. The value of the expressions 4/(3*(2-1)) and 4/3*(2-1) is the same. State whether true or false.

a) True

b) False

View Answer

Answer: a
Explanation: Although the presence of parenthesis does affect the order of precedence, in the case shown above, it is not making a difference. The result of both of these expressions is 1.333333333. Hence the statement is true.

2. The value of the expression:

```
4 + 3 % 5
```

a) 4

b) 7

c) 2

d) 0

View Answer

Answer: b
Explanation: The order of precedence is: %, +. Hence the expression above, on simplification results in 4 + 3 = 7. Hence the result is 7.

3. Evaluate the expression given below if A= 16 and B = 15.

```
A % B // A
```

a) 0.0

b) 0

c) 1.0

d) 1

View Answer

Answer: b
Explanation: The above expression is evaluated as: 16%15//16, which is equal to 1//16, which results in 0.

4. Which of the following operators has its associativity from right to left?

a) +

b) //

c) %

d) **

View Answer

Answer: d
Explanation: All of the operators shown above have associativity from left to right, except exponentiation operator (**) which has its associativity from right to left.

5. What is the value of x if:

```
x = int(43.55+2/2)
```

a) 43

b) 44

c) 22

d) 23

View Answer

Answer: b
Explanation: The expression shown above is an example of explicit conversion. It is evaluated as int(43.55+1) = int(44.55) = 44. Hence the result of this expression is 44.

6. What is the value of the following expression?

```
2+4.00, 2**4.0
```

a) (6.0, 16.0)

b) (6.00, 16.00)

c) (6, 16)

d) (6.00, 16.0)

View Answer

Answer: a
Explanation: The result of the expression shown above is (6.0, 16.0). This is because the result is automatically rounded off to one decimal place.

7. Which of the following is the truncation division operator?

a) /

b) %

c) //

d) |

View Answer

Answer: c
Explanation: // is the operator for truncation division. It it called so because it returns only the integer part of the quotient, truncating the decimal part. For example: 20//3 = 6.

8. What are the values of the following expressions:

```
2**(3**2)
(2**3)**2
2**3**2
```

a) 64, 512, 64

b) 64, 64, 64

c) 512, 512, 512

d) 512, 64, 512

View Answer

Answer: d
Explanation: Expression 1 is evaluated as: 2**9, which is equal to 512.Expression 2 is evaluated as 8**2, which is equal to 64. The last expression is evaluated as 2**(3**2). This is because the associativity of ** operator is from right to left. Hence the result of the third expression is 512.

9. What is the value of the following expression:

```
8/4/2, 8/(4/2)
```

a) (1.0, 4.0)

b) (1.0, 1.0)

c) (4.0. 1.0)

d) (4.0, 4.0)

View Answer

Answer: a
Explanation: The above expressions are evaluated as: 2/2, 8/2, which is equal to (1.0, 4.0).

10. What is the value of the following expression:

```
float(22//3+3/3)
```

a) 8

b) 8.0

c) 8.3

d) 8.33

View Answer

Answer: b
Explanation: The expression shown above is evaluated as: float(7+1) = float(8) = 8.0. Hence the result of this expression is 8.0.

Python Questions and Answers – Precedence and Associativity – 2

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

1. What is the output of the following expression:

```
print(4.00/(2.0+2.0))
```

a) Error

b) 1.0

c) 1.00

d) 1

View Answer

Answer: b
Explanation: The result of the expression shown above is 1.0 because print rounds off digits.

2. Consider the expression given below. The value of X is:

```
X = 2+9*((3*12)-8)/10
```

a) 30.0

b) 30.8

c) 28.4

d) 27.2

View Answer

Answer: d
Explanation: The expression shown above is evaluated as: 2+9*(36-8)/10, which simplifies to give 2+9*(2.8), which is equal to 2+25.2 = 27.2. Hence the result of this expression is 27.2.

3. Which of the following expressions involves coercion when evaluated in Python?

a) 4.7 – 1.5

b) 7.9 * 6.3

c) 1.7 % 2

d) 3.4 + 4.6

View Answer

Answer: c
Explanation: Coercion is the implicit (automatic) conversion of operands to a common type. Coercion is automatically performed on mixed-type expressions. The expression 1.7 % 2 is evaluated as 1.7 % 2.0 (that is, automatic conversion of int to float).

4. What is the value of the following expression:

```
24//6%3, 24//4//2
```

a) (1,3)

b) (0,3)

c) (1,0)

d) (3,1)

View Answer

Answer: a
Explanation: The expressions are evaluated as: 4%3 and 6//2 respectively. This results in the answer (1,3). This is because the associativity of both of the expressions shown above is left to right.

5. Which among the following list of operators has the highest precedence?

```
 +, -, **, %, /, <<, >>, |
```

a) <<, >>

b) **

c) |

d) %

View Answer

Answer: b
Explanation: The highest precedence is that of the exponentiation operator, that is of **.

6. What is the value of the expression:

```
float(4+int(2.39)%2)
```

a) 5.0

b) 5

c) 4.0

d) 4

View Answer

Answer: c
Explanation: The above expression is an example of explicit conversion. It is evaluated as: float(4+int(2.39)%2) = float(4+2%2) = float(4+0) = 4.0. Hence the result of this expression is 4.0.

7. Which of the following expressions is an example of type conversion?

a) 4.0 + float(3)

b) 5.3 + 6.3

c) 5.0 + 3

d) 3 + 7

View Answer

Answer: a
Explanation: Type conversion is nothing but explicit conversion of operands to a specific type. Options ‘b’ and ‘c’ are examples of implicit conversion whereas option ‘a’ is an example of explicit conversion or type conversion.

8. Which of the following expressions results in an error?

a) float('10')

b) int('10')

c) float('10.8')

d) int('10.8')

View Answer

9. What is the value of the expression:

```
4+2**5//10
```

a) 3

b) 7

c) 77

d) 0

View Answer

Answer: b
Explanation: The order of precedence is: **, //, +. The expression 4+2**5//10 is evaluated as 4+32//10, which is equal to 4+3 = 7. Hence the result of the expression shown above is 7.

10. The expression 2**2**3 is evaluates as: (2**2)**3. State whether this statement is true or false.

a) True

b) False

View Answer

Answer: b
Explanation: The value of the expression (2**2)**3 = 4**3 = 64. When the expression 2**2**3 is evaluated in python, we get the result as 256, because this expression is evaluated as 2**(2**3). This is because the associativity of exponentiation operator (**) is from right to left and not from left to right.

Python Questions and Answers – Bitwise – 1

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on "Bitwise – 1".

1. What is the result of the snippet of code shown below if x=1?

```
x<<2
```

a) 8

b) 1

c) 2

d) 4

View Answer

Answer: d
Explanation: The binary form of 1 is 0001. The expression x<<2 implies we are performing bitwise left shift on x. This shift yields the value: 0100, which is the binary form of the number 4.

2. The output of the expression is:

```
bin(29)
```

a) ‘0b10111’

b) ‘0b11101’

c) ‘0b11111’

d) ‘0b11011’

View Answer

Answer: b
Explanation: The binary form of the number 29 is 11101. Hence the output of this expression is ‘0b11101’.

3. What is the value of x if:

```
x>>2=2
```

a) 8

b) 4

c) 2

d) 1

View Answer

Answer: a
Explanation: When the value of x is equal to 8 (1000), then x>>2 (bitwise right shift) yields the value 0010, which is equal to 2. Hence the value of x is 8.

4. What is the result of the expression:

```
int(1011)?
```

a) 1011

b) 11

c) 13

c) 1101

View Answer

Answer: a
Explanation: The result of the expression shown will be 1011. This is because we have not specified the base in this expression. Hence it automatically takes the base as 10.

5. To find the decimal value of 1111, that is 15, we can use the function:

a) int(1111,10)

b) int(‘1111’,10)

c) int(1111,2)

d) int(‘1111’,2)

View Answer

Answer: d
Explanation: The expression int(‘1111’,2) gives the result 15. The expression int(‘1111’, 10) will give the result 1111.

6. What is the result of the expression if x=15 and y=12:

```
x & y
```

a) b1101

b) 0b1101

c) 12

d) 1101

View Answer

Answer: c
Explanation: The symbol ‘&’ represents bitwise AND. This gives 1 if both the bits are equal to 1, else it gives 0. The binary form of 15 is 1111 and that of 12 is 1100. Hence on performing the bitwise AND operation, we get 1100, which is equal to 12.

7. Which of the following expressions results in an error?

a) int(1011)

b) int(‘1011’,23)

c) int(1011,2)

d) int(‘1011’)

View Answer

Answer: c
Explanation: The expression int(1011,2) results in an error. Had we written this expression as int(‘1011’,2), then there would not be an error.

8. Which of the following represents the bitwise XOR operator?

a) &

b) ^

c) |

d) !

View Answer

Answer: b
Explanation: The ^ operator represent bitwise XOR operation. &: bitwise AND, | : bitwise OR and ! represents bitwise NOT.

9. What is the value of this expression?

```
bin(0x8)
```

a) ‘0bx1000’

b) 8

c) 1000

d) ‘0b1000’

View Answer

Answer: d
Explanation: The prefix 0x specifies that the value is hexadecimal in nature. When we convert this hexadecimal value to binary form, we get the result as: ‘0b1000’.

10. What is the result of the expression:

```
0x35 | 0x75
```

a) 115

b) 116

c) 117

d) 118

View Answer

Answer: c
Explanation: The binary value of 0x35 is 110101 and that of 0x75 is 1110101. On OR-ing these two values we get the output as: 1110101, which is equal to 117. Hence the result of the above expression is 117.

Python Questions and Answers – Bitwise – 2

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

1. It is not possible for the two’s complement value to be equal to the original value in any case. State whether this statement is true or false.

a) True

b) False

View Answer

Answer: b
Explanation: In most cases the value of two’s complement is different from the original value. However, there are cases in which the two’s complement value may be equal to the original value. For example, the two’s complement of 10000000 is also equal to 10000000. Hence the statement is false.

2. The one’s complement of 110010101 is:

a) 001101010

b) 110010101

c) 001101011

d) 110010100

View Answer

Answer: a
Explanation: The one’s complement of a value is obtained by simply changing all the 1’s to 0’s and all the 0’s to 1’s. Hence the one’s complement of 110010101 is 001101010.

3. Bitwise _________ gives 1 if either of the bits is 1 and 0 when both of the bits are 1.

a) OR

b) AND

c) XOR

d) NOT

View Answer

Answer: c
Explanation: Bitwise XOR gives 1 if either of the bits is 1 and 0 when both of the bits are 1.

4. The result of the expression shown below is:

```
4^12
```

a) 2

b) 4

c) 8

d) 12

View Answer

Answer: c
Explanation: ^ is the XOR operator. The binary form of 4 is 0100 and that of 12 is 1100. Therefore, 0100^1100 is 1000, which is equal to 8.

5. Any odd number on being AND-ed with ________ always gives 1. Hint: Any even number on being AND-ed with this value always gives 0.

a) 10

b) 2

c) 1

d) 0

View Answer

Answer: c
Explanation: Any odd number on being AND-ed with 1 always gives 1. Any even number on being AND-ed with this value always gives 0.

6. What is the value of this expression:

```
 bin(10-2)+bin(12^4)
```

a) 0b10000

b) 0b10001000

c) 0b1000b1000

d) 0b10000b1000

View Answer

Answer: d
Explanation: The output of bin(10-2)= 0b1000 and that of bin(12^4) is ob1000. Hence the output of the above expression is: 0b10000b1000.

7. Which of the following expressions can be used to multiply a given number ‘a’ by 4?

a) a<<2

b) a<<4

c) a>>2

d) a>>4

View Answer

Answer: a
Explanation: Let us consider an example wherein a=2. The binary form of 2 is 0010. When we left shift this value by 2, we get 1000, the value of which is 16. Hence if we want to multiply a given number ‘a’ by 4, we can use the expression: a<<2.

8. What is the output of the code show below if a=10 and b =20?

```
a=10
b=20
a=a^b
b=a^b
a=a^b
print(a,b)
```

a) 10 20

b) 10 10

c) 20 10

d) 20 20

View Answer

Answer: c
Explanation: The code shown above is used to swap the contents of two memory locations using bitwise X0R operator. Hence the output of the code shown above is: 20 10.

9. What is the two’s complement of -44?

a) 1011011

b) 11010100

c) 11101011

d) 10110011

View Answer

Answer: b
Explanation: The binary form of -44 is 00101100. The one’s complement of this value is 11010011. On adding one to this we get: 11010100 (two’s complement).

10. What is the value of the expression:

```
~100?
```

a) 101

b) -101

c) 100

d) -100

View Answer

Answer: b
Explanation: Suppose we have an expression ~A. This is evaluated as: -A – 1. Therefore, the expression ~100 is evaluated as -100 – 1, which is equal to -101.

Python Questions and Answers – Boolean

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

1. The output of the snippet of code shown below?

```
bool(‘False’)
bool()
```

a) True

True

b) False

True

c) False

False

d) True

False

View Answer

Answer: d
Explanation: The Boolean function returns true if the argument passed to the bool function does not amount to zero. In the first example, the string ‘False’ is passed to the function bool. This does not amount to zero and hence the output is true. In the second function, an empty list is passed to the function bool. Hence the output is false.

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

```
['hello', 'morning'][bool('')]
```

a) error

b) no output

c) hello

d) morning

View Answer

Answer: c
Explanation: The line of code shown above can be simplified to state that ‘hello’ should be printed if the argument passed to the Boolean function amounts to zero, else ‘morning’ will be printed.

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

```
not(3>4)
not(1&1)
```

a) True

True

b) True

False

c) False

True

d) False

False

View Answer

Answer: b
Explanation: The function not returns true if the argument amounts to false, and false if the argument amounts to true. Hence the first function returns false, and the second function returns false.

4. What is the output of the code shown?

```
['f', 't'][bool('spam')]
```

a) t

b) f

c) No output

d) Error

View Answer

Answer: a
Explanation: The line of code can be translated to state that ‘f’ is printed if the argument passed to the Boolean function amount to zero. Else ‘t’ is printed. The argument given to the Boolean function in the above case is ‘spam’, which does not amount to zero. Hence the output is: t.

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

```
l=[1, 0, 2, 0, 'hello', '', []]
list(filter(bool, l))
```

a) Error

b) [1, 0, 2, 0, ‘hello’, ”, []]

c) [1, 0, 2, ‘hello’, ”, []]

d) [1, 2, ‘hello’]

View Answer

Answer: d
Explanation: The code shown above returns a new list containing only those elements of the list l which do not amount to zero. Hence the output is: [1, 2, ‘hello’]

6. What is the output of the following code if the system date is 21st June, 2017 (Wednesday)?

[ ] or {}

{} or [ ]

a) [ ]

{}

b) [ ]

[ ]

c) {}

[ ]

d) {}

{}

View Answer

Answer: c
Explanation: The code shown above shows two functions. In both the cases the right operand is returned. This is because each function is evaluated from left to right. Since the left operand is false, it is assumed that the right operand must be true and hence the right operand is returned in each of the above case.

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

```
class Truth:
        pass
x=Truth()
bool(x)
```

a) pass

b) true

c) false

d) error

View Answer

Answer: b
Explanation: If the truth method is not defined, the object is considered true. Hence the output of the code shown above is true.

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

```
if (9 < 0) and (0 < -9):
    print("hello")
elif (9 > 0) or False:
    print("good")
else:
    print("bad")
```

a) error

b) hello

c) good

d) bad

View Answer

Answer: c
Explanation: The code shown above prints the appropriate option depending on the conditions given. The condition which matches is (9>0), and hence the output is: good.

9. Which of the following Boolean expressions is not logically equivalent to the other three?

a) not(-6<0 or-6>10)

b) -6>=0 and -6<=10

c) not(-6<10 or-6==10)

d) not(-6>10 or-6==10)

View Answer

Answer: d
Explanation: The expression not(-6<0 or -6>10) returns the output False.
The expression -6>=0 and -6<=10 returns the output False.
The expression not(-6<10 or -6==10) returns the output False.
The expression not(-6>10 or -6==10) returns the output True.

10. The output of the line of code shown below is:

```
not(10<20) and not(10>30)
```

a) True

b) False

c) Error

d) No output

View Answer

Answer: b
Explanation: The expression not(10<20) returns false. The expression not(10>30) returns true. The and operation between false and true returns false. Hence the output is false.

Python Question and Answers – Formatting – 1

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

1. What is the output of the code snippet shown below?

```
X=”hi”
print(“05d”%X)
```

a) 00000hi

b) 000hi

c) hi000

d) error

View Answer

Answer: d
Explanation: The code snippet shown above results in an error because the above formatting option works only if ‘X’ is a number. Since in the above case ‘X’ is a string, an error is thrown.

2. Consider the snippet of code shown below and predict the output.

```
X=”san-foundry”
print(“%56s”,X)
```

a) 56 blank spaces before san-foundry

b) 56 blank spaces before san and foundry

c) 56 blank spaces after san-foundry

d) no change

View Answer

Answer: a
Explanation: The formatting option print(“%Ns”,X) helps us add ‘N’ number of spaces before a given string ‘X’. Hence the output for the code snippet shown above will be 56 blank spaces before the string “san-foundry”.

3. What is the output of the following expression if x=456?

```
print("%-06d"%x)
```

a) 000456

b) 456000

c) 456

d) error

View Answer

Answer: c
Explanation: The expression shown above results in the output 456.

4. What is the output of the following expression if X=345?

```
print(“%06d”%X)
```

a) 345000

b) 000345

c) 000000345

d) 345000000

View Answer

Answer: b
Explanation: The above expression returns the output 000345. It adds the required number of

zeroes before the given number in order to make the number of digits 6 (as specified in this case).

5. Which of the following formatting options can be used in order to add ‘n’ blank spaces after a given string ‘S’?

a) print(“-ns”%S)

b) print(“-ns”%S)

c) print(“%ns”%S)

d) print(“%-ns”%S)

View Answer

Answer: d
Explanation: In order to add ‘n’ blank spaces after a given string ‘S’, we use the formatting option:(“%-ns”%S).

6. What is the output of this expression if X= -122?

```
print("-%06d"%x)
```

a) -000122

b) 000122

c) –00122

d) -00122

View Answer

Answer: c
Explanation: The given number is -122. Here the total number of digits (including the negative sign) should be 6 according to the expression. In addition to this, there is a negative sign in the given expression. Hence the output will be – -00122.

7. What is the output of the following expression if the value of x is 34?

```
print(“%f”%x)
```

a) 34.00

b) 34.0000

c) 34.000000

d) 34.00000000

View Answer

Answer: c
Explanation: The expression shown above normally returns the value with 6 decimal points if it is not specified with any number. Hence the output of this expression will be: 34.000000 (6 decimal points).

8. What is the result of the expression shown below if x=56.236?

```
print("%.2f"%x)
```

a) 56.00

b) 56.24

c) 56.23

d) 0056.236

View Answer

Answer: b
Explanation: The expression shown above rounds off the given number to the number of decimal places specified. Since the expression given specifies rounding off to two decimal places, the output of this expression will be 56.24. Had the value been x=56.234 (last digit being any number less than 5), the output would have been 56.23.

9. What is the output of this expression if x=22.19?

```
print("%5.2f"%x)
```

a) 22.1900

b) 22.00000

c) 22.19

d) 22.20

View Answer

Answer: c
Explanation: The output of the expression above will be 22.19. This expression specifies that the total number of digits (including the decimal point) should be 5, rounded off to two decimal places.

10. The expression shown below results in an error. State whether this statement is true or false.

```
print("-%5d0",989)
```

a) True

b) False

View Answer

Answer: b
Explanation: The expression shown above does not result in an error. The output of this expression is -%5d0 989. Hence this statement is incorrect.

Python Question and Answers – Formatting – 2

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

1. The output of the snippet of code shown below is:

```
'%d %s %g you' %(1, 'hello', 4.0)
```

a) Error

b) 1 hello you 4.0

c) 1 hello 4 you

d) 1 4 hello you

View Answer

Answer: c
Explanation: In the snippet of code shown above, three values are inserted into the target string. When we insert more than one value, we should group the values on the right in a tuple. The % formatting expression operator expects either a single item or a tuple of one or more items on its right side.

2. The output of which of the codes shown below will be: “There are 4 blue birds.”?

a) ‘There are %g %d birds.’ %4 %blue

b) ‘There are %d %s birds.’ %(4, blue)

c) ‘There are %s %d birds.’ %[4, blue]

d) ‘There are %d %s birds.’ 4, blue

View Answer

Answer: b
Explanation: The code ‘There are %d %s birds.’ %(4, blue) results in the output: There are 4 blue birds. When we insert more than one value, we should group the values on the right in a tuple.

3. What is the output of the code shown below if the system date is 18th August, 2016?

```
x=1234
res='integers:...%d...%-6d...%06d' %(x, x, x)
res
```

a) ‘integers:…1234…1234 …001234’

b) ‘integers…1234…1234…123400’

c) ‘integers:… 1234…1234…001234’

d) ‘integers:…1234…1234…001234’

View Answer

Answer: a
Explanation: The code shown above prints 1234 for the format specified %d, ‘ 1234’ for the format specifier %-6d, and 001234 for the format specifier %06d. Hence the output of this code is:) ‘integers:…1234…1234 …001234’

4. What is the output of the code shown?

```
x=3.3456789
'%f | %e | %g' %(x, x, x)
```

a) Error

b) ‘3.3456789 | 3.3456789+00 | 3.345678’

c) ‘3.345678 | 3.345678e+0 | 3.345678’

d) ‘3.345679 | 3.345679e+00 | 3.34568’

View Answer

Answer: d
Explanation: The %f %e and %g format specifiers represent floating point numbers in different

ways. %e and %E are the same, except that the exponent is in lowercase. %g chooses the format by number content. Hence the output of this code is: ‘3.345679 | 3.345679e+00 | 3.34568’.

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

```
x=3.3456789
'%-6.2f | %05.2f | %+06.1f' %(x, x, x)
```

a) ‘3.35 | 03.35 | +003.3’

b) ‘3.3456789 | 03.3456789 | +03.3456789’

c) Error

d) ‘3.34 | 03.34 | 03.34+’

View Answer

Answer: a
Explanation: The code shown above rounds the floating point value to two decimal places. In this code, a variety of addition formatting features such as zero padding, total field width etc. Hence the output of this code is: ‘3.35 | 03.35 | +003.3’.

6. What is the output of the code shown?

```
x=3.3456789
'%s' %x, str(x)
```

a) Error

b) (‘3.3456789’, ‘3.3456789’)

c) (3.3456789, 3.3456789)

d) (‘3.3456789’, 3.3456789)

View Answer

Answer: b
Explanation: We can simply convert strings with a %s format expression or the str built-in function. Both of these methods have been shown in this code. Hence the output is:) (‘3.3456789’, ‘3.3456789’)

7. What is the output of the code shown?

```
'%(qty)d more %(food)s' %{'qty':1, 'food': 'spam'}
```

a) Error

b) No output

c) ‘1 more foods’

d) ‘1 more spam’

View Answer

Answer: d
Explanation: String formatting also allows conversion targets on the left to refer to the keys in a dictionary coded on the right and fetch the corresponding values. In the code shown above, (qty) and (food) in the format string on the left refers to keys in the dictionary literal on the right and fetch their assorted values. Hence the output of the code shown above is: 1 more spam.

8. What is the output of the code shown?

```
a='hello'
q=10
vars()
```

a) {‘a’ : ‘hello’, ‘q’ : 10, ……..plus built-in names set by Python….}

b) {……Built in names set by Python……}

c) {‘a’ : ‘hello’, ‘q’ : 10}

d) Error

View Answer

Answer: a
Explanation: The built in function vars() returns a dictionary containing all the variables that exist in the place. Hence the output of the code shown above is: {‘a’ : ‘hello’, ‘q’ : 10, ……..plus built-in names set by Python….}

9. The output of the code shown below is:

```
s='{0}, {1}, and {2}'
s.format('hello', 'good', 'morning')
```

a) ‘hello good and morning’

b) ‘hello, good, morning’

c) ‘hello, good, and morning’

d) Error

View Answer

Answer: c
Explanation: Within the subject string, curly braces designate substitution targets and arguments to be inserted either by position or keyword. Hence the output of the code shown above:’hello, good,and morning’.

10. What is the output of the code shown?

```
s='%s, %s & %s'
s%('mumbai', 'kolkata', 'delhi')
```

a) mumbai kolkata & delhi

b) Error

c) No output

d) ‘mumbai, kolkata & delhi’

View Answer

Answer: d
Explanation: In the code shown above, the format specifier %s is replaced by the designated substitution. Hence the output of the code shown above is: ‘mumbai, kolkata & delhi’.

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

```
t = '%(a)s, %(b)s, %(c)s'
t % dict(a='hello', b='world', c='universe')
```

a) ‘hello, world, universe’

b) ‘hellos, worlds, universes’

c) Error

d) hellos, world, universe

View Answer

Answer: a
Explanation: Within the subject string, curly braces represent substitution targets and arguments to be inserted. Hence the output of the code shown above:
‘hello, world, universe’.

12. What is the output of the code shown?

```
'{a}, {0}, {abc}'.format(10, a=2.5, abc=[1, 2])
```

a) Error

b) ‘2.5, 10, [1, 2]’

c) 2.5, 10, 1, 2

d) ’10, 2.5, [1, 2]’

View Answer

Answer: b
Explanation: Since we have specified that the order of the output be: {a}, {0}, {abc}, hence the value of associated with {a} is printed first followed by that of {0} and {abc}. Hence the output of the code shown above is: ‘2.5, 10, [1, 2]’.

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

```
'{0:.2f}'.format(1.234)
```

a) ‘1’

b) ‘1.234’

c) ‘1.23’

d) ‘1.2’

View Answer

Answer: c
Explanation: The code shown above displays the string method to round off a given decimal number to two decimal places. Hence the output of the code is: ‘1.23’.

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

```
'%x %d' %(255, 255)
```

a) ‘ff, 255’

b) ‘255, 255’

c) ‘15f, 15f’

d) Error

View Answer

Answer: a
Explanation: The code shown above converts the given arguments to hexadecimal and decimal values and prints the result. This is done using the format specifiers %x and %d respectively. Hence the output of the code shown above is: ‘ff, 255’.

15. The output of the two codes shown below is the same. State whether true or false.

```
'{0:.2f}'.format(1/3.0)
'%.2f'%(1/3.0)
```

a) True

b) False

View Answer

Answer: a
Explanation: The two codes shown above represent the same operation, but in different formats. The output of both of these functions is: ‘0.33’. Hence the statement is true.

Python Questions and Answers – Advanced Formatting Tools

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

1. What is the output of the code shown?

```
l=list('HELLO')
'first={0[0]}, third={0[2]}'.format(l)
```

a) ‘first=H, third=L’

b) ‘first=0, third=2’

c) Error

d) ‘first=0, third=L’

View Answer

Answer: a
Explanation: In the code shown above, the value for first is substituted by l[0], that is H and the value for third is substituted by l[2], that is L. Hence the output of the code shown above is: ‘first=H, third=L’. The list l= [‘H’, ‘E’, ‘L’, ‘L’, ‘O’].

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

```
l=list('HELLO')
p=l[0], l[-1], l[1:3]
'a={0}, b={1}, c={2}'.format(*p)
```

a) Error

b) “a=’H’, b=’O’, c=(E, L)”

c) “a=H, b=O, c=[‘E’, ‘L’]”

d) Junk value

View Answer

Answer: c
Explanation: In the code shown above, the value for a is substituted by l[0], that is ‘H’, the value of b is substituted by l[-1], that is ‘O’ and the value for c is substituted by l[1:3]. Here the use of *p is to unpack a tuple’s items into individual function arguments.

3. Fill in the blanks:

The formatting method {1:<10} represents the ___________ positional argument, _________ justified in a 10 character wide field.

a) first, right

b) second, left

c) first, left

d) second, right

View Answer

Answer: b
Explanation: The formatting method {1:<10} represents the second positional argument, left justified in a 10 character wide field.

4. What is the output of the following code?

```
hex(255), int('FF', 16), 0xFF
```

a) [0xFF, 255, 16, 255]

b) (‘0xff’, 155, 16, 255)

c) Error

d) (‘0xff’, 255, 255)

View Answer

Answer: d
Explanation: The code shown above converts the value 255 into hexadecimal, that is, 0xff. The value ‘FF’ into integer. Hence the output of the code shown is: (‘0xff’, 255, 255).

5. The output of the two codes shown below is the same. State whether this statement is true or false.

```
 bin((2**16)-1)
 '{}'.format(bin((2**16)-1))
```

a) True

b) False

View Answer

Answer: a
Explanation: The output of both of the codes shown above is ‘0b1111111111111111’. Hence the statement is true.

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

```
'{a}{b}{a}'.format(a='hello', b='world')
```

a) ‘hello world’

b) ‘hello’ ‘world’ ‘hello’

c) ‘helloworldhello’

d) ‘hello’ ‘hello’ ‘world’

View Answer

Answer: c
Explanation: The code shown above prints the values substituted for a, b, a, in the same order. This operation is performed using the format function. Hence the output of the code is: ‘helloworldhello’.

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

```
 D=dict(p='san', q='foundry')
'{p}{q}'.format(**D)
```

a) Error

b) sanfoundry

c) san foundry

d) {‘san’, ‘foundry’}

View Answer

Answer: b
Explanation: The code shown above prints the values substituted for p and q in the same order. Note that there is no blank space between p and q. Hence the output is: sanfoundry.

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

```
'The {} side {1} {2}'.format('bright', 'of', 'life')
```

a) Error

b) ‘The bright side of life’

c) ‘The {bright} side {of} {life}’

d) No output

View Answer

Answer: a
Explanation: The code shown above results in an error. This is because we have switched from automatic field numbering to manual field numbering, that is, from {} to {1}. Hence this code results in an error.

9. The output of the code shown below is:

```
'{0:f}, {1:2f}, {2:05.2f}'.format(1.23456, 1.23456, 1.23456)
```

a) Error

b) ‘1.234560, 1.22345, 1.23’

c) No output

d) ‘1.234560, 1.234560, 01.23’

View Answer

Answer: d
Explanation: In the code shown above, various formatting options are displayed using the format option. Hence the output of this code is: ‘1.234560, 1.234560, 01.23’

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

```
'%.2f%s' % (1.2345, 99)
```

a) ‘1.2345’, ‘99’

b) ‘1.2399’

c) ‘1.234599’

d) 1.23, 99

View Answer

Answer: b
Explanation: In this code, we must notice that since multiple values haven been given, they should be enclosed in a tuple. Since the formatting format is %.2f, the value 1.2345 is reduced to two decimal places. Hence the output of the code shown above: ‘1.2399’.

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

```
'%s' %((1.23,),)
```

a) ‘(1.23,)’

b) 1.23,

c) (,1.23)

d) ‘1.23’

View Answer

Answer: a
Explanation: The formatting expression accepts either a single substitution value, or a tuple of one or more items. Since single item can be given either by itself or within the tuple, a tuple to be formatted must be provided as a tested tuple. Hence the output of the code is: >>> ‘%s’ %((1.23,),).

12. What is the output of the two codes shown below?

```
'{0}'.format(4.56)
'{0}'.format([4.56,])
```

a) ‘4.56’, ‘4.56,’

b) ‘4.56’, ‘[4.56]’

c) 4.56, [4.56,]

d) 4.56, [4.56,]

View Answer

Answer: b
Explanation: The code shown above shows the formatting option on the same value, that is 4.56, where in the second case, the value is enclosed in a list. Hence the output of the code shown above is:
‘4.56’, ‘[4.56]’

Python Questions and Answers – Decorators

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

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

```
def mk(x):
    def mk1():
        print("Decorated")
        x()
    return mk1
def mk2():
    print("Ordinary")
p = mk(mk2)
p()
```

a) Decorated

Decorated

b) Ordinary

Ordinary

c) Ordinary

Decorated

d) Decorated

Ordinary

View Answer

Answer: d
Explanation: The code shown above first prints the word “Decorated” and then “ordinary”. Hence the output of this code is:
Decorated
Ordinary.

2. In the code shown below, which function is the decorator?

```
def mk(x):
    def mk1():
        print("Decorated")
        x()
    return mk1
def mk2():
    print("Ordinary")
p = mk(mk2)
p()
```

a) p()

b) mk()

c) mk1()

d) mk2()

View Answer

Answer: b
Explanation: In the code shown above, the function mk() is the decorator. The function which is getting decorated is mk2(). The return function is given the name p().

3. The _______ symbol along with the name of the decorator function can be placed above the definition of the function to be decorated works as an alternate way for decorating a function.

a) #

b) $

c) @

d) &

View Answer

Answer: c
Explanation: The @ symbol along with the name of the decorator function can be placed above the definition of the function to be decorated works as an alternate way for decorating a function.

4. What is the output of the code shown?

```
def ordi():
        print("Ordinary")
ordi
ordi()
```

a) Address
Ordinary

b) Error
Address

c) Ordinary
Ordinary

d) Ordinary
Address

View Answer

Answer: a
Explanation: The code shown above returns the address on the function ordi first, after which the word “Ordinary” is printed. Hence the output of this code is:
Address
Ordinary.

5. The two snippets of codes shown below are equivalent. State whether true or false.

```
CODE 1
  @f
def f1():
        print(“Hello”)
CODE 2
  def f1():
         print(“Hello”)
f1 = f(f1)
```

a) True

b) False

View Answer

Answer: a
Explanation: The @ symbol can be used as an alternate way to specify a function that needs to be decorated. The output of the codes shown above is the same. Hence they are equivalent. Therefore this statement is true.

6. What is the output of the following function?

```
def f(p, q):
        return p%q
f(0, 2)
f(2, 0)
```

a) 0

0

b) Zero Division Error

Zero Division Error

c) 0

Zero Division Error

d) Zero Division Error

0

View Answer

Answer: c
Explanation: The output of f(0, 2) is 0, since o%2 is equal to 0. The output of the f(2, 0) is a Zero Division Error. We can make use of decorators in order to avoid this error.

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

```
def f(x):
    def f1(a, b):
        print("hello")
        if b==0:
            print("NO")
            return
        return f(a, b)
    return f1
@f
def f(a, b):
    return a%b
f(4,0)
```

a) hello

NO

b) hello

Zero Division Error

c) NO

d) hello

View Answer

Answer: a
Explanation: In the code shown above, we have used a decorator in order to avoid the Zero Division Error. Hence the output of this code is:
hello
NO.

8. What are the output of the code shown below?

```
def f(x):
    def f1(*args, **kwargs):
        print("*"* 5)
        x(*args, **kwargs)
        print("*"* 5)
    return f1
def a(x):
    def f1(*args, **kwargs):
        print("%"* 5)
        x(*args, **kwargs)
        print("%"* 5)
    return f1
@f
@a
def p(m):
    print(m)
p("hello")
```

a) *****

%%%%%

hello

%%%%%

*****

b) Error

c) *****%%%%%hello%%%%%*****

d) hello

View Answer

Answer: a
Explanation: The code shown above uses multiple decorators. The output of this code is:
*****
%%%%%
hello
%%%%%
*****

9. The code shown above can work with ____ parameters.

```
def f(x):
    def f1(*args, **kwargs):
           print("Sanfoundry")
           return x(*args, **kwargs)
    return f1
```

a) 2

b) 1

c) any number of

d) 0

View Answer

Answer: c
Explanation: The code shown above shows a general decorator which can work with any number o arguments.

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

```
def f(x):
    def f1(*args, **kwargs):
        print("*", 5)
        x(*args, **kwargs)
        print("*", 5)
    return f1
@f
def p(m):
    p(m)
print("hello")
```

a) *****

hello

b) *****

*****

hello

c) *****

d) hello

View Answer

Answer: d
Explanation: In the code shown above, we have not passed any parameter to the function p. Hence the output of this code is: hello.

11. A function with parameters cannot be decorated. State whether true or false.

a) True

b) False

View Answer

12. Identify the decorator in the snippet of code shown below.

```
def sf():
     pass
sf = mk(sf)
@f
def sf():
     return
```

a) @f

b) f

c) sf()

d) mk

View Answer

Answer: d
Explanation: In the code shown above, @sf is not a decorator but only a decorator line. The '@' symbol represents the application of a decorator. The decorator here is the function mk.

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

```
class A:
    @staticmethod
    def a(x):
        print(x)
A.a(100)
```

a) Error

b) Warning

c) 100

d) No output

View Answer

Answer: c
Explanation: The code shown above demonstrates rebinding using a static method. This can be done with or without a decorator. The output of this code will be 100.

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

```
def d(f):
    def n(*args):
        return '$' + str(f(*args))
    return n
@d
def p(a, t):
    return a + a*t
print(p(100,0))
```

a) 100

b) $100

c) $0

d) 0

View Answer

Answer: b
Explanation: In the code shown above, the decorator helps us to prefix the dollar sign along with the value. Since the second argument is zero, the output of the code is: $100.

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

```
def c(f):
    def inner(*args, **kargs):
        inner.co += 1
        return f(*args, **kargs)
    inner.co = 0
    return inner
@c
def fnc():
    pass
if __name__ == '__main__':
    fnc()
    fnc()
    fnc()
    print(fnc.co)
```

a) 4

b) 3

c) 0

d) 1

View Answer

Answer: b
Explanation: The code shown above returns the number of times a given function has been called. Hence the output of this code is: 3

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%0O7 == 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%0O11 == 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%0O9 == 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 – 2

This set of Advanced Python Questions & Answers focuses on “While and For Loops – 2”.

1. What is the output of the following?

```
i = 0
while i < 5:
    print(i)
    i += 1
    if i == 3:
        break
else:
    print(0)
```

a) 0 1 2 0

b) 0 1 2

c) error

d) none of the mentioned

View Answer

Answer: b
Explanation: The else part is not executed if control breaks out of the loop.

2. What is the output of the following?

```
i = 0
while i < 3:
    print(i)
    i += 1
else:
    print(0)
```

a) 0 1 2 3 0

b) 0 1 2 0

c) 0 1 2

c) error

View Answer

Answer: b
Explanation: The else part is executed when the condition in the while statement is false.

3. What is the output of the following?

```
x = "abcdef"
while i in x:
    print(i, end=" ")
```

a) a b c d e f

b) abcdef

c) i i i i i i …

d) error

View Answer

Answer: d
Explanation: NameError, i is not defined.

4. What is the output of the following?

```
x = "abcdef"
i = "i"
while i in x:
    print(i, end=" ")
```

a) no output

b) i i i i i i …

c) a b c d e f

d) abcdef

View Answer

Answer: a
Explanation: “i” is not in “abcdef”.

5. What is the output of the following?

```
x = "abcdef"
i = "a"
while i in x:
    print(i, end = " ")
```

a) no output

b) i i i i i i …

c) a a a a a a …

d) a b c d e f

View Answer

Answer: c
Explanation: As the value of i or x isn’t changing, the condition will always evaluate to True.

6. What is the output of the following?

```
x = "abcdef"
i = "a"
while i in x:
    print('i', end = " ")
```

a) no output

b) i i i i i i …

c) a a a a a a …

d) a b c d e f

View Answer

Answer: b
Explanation: As the value of i or x isn’t changing, the condition will always evaluate to True.

7. What is the output of the following?

```
x = "abcdef"
i = "a"
while i in x:
    x = x[:-1]
    print(i, end = " ")
```

a) i i i i i i

b) a a a a a a

c) a a a a a

d) none of the mentioned

View Answer

Answer: b
Explanation: The string x is being shortened by one charater in each iteration.

8. What is the output of the following?

```
x = "abcdef"
i = "a"
while i in x[:-1]:
    print(i, end = " ")
```

a) a a a a a

b) a a a a a a

c) a a a a a a …

d) a

View Answer

Answer: c
Explanation: String x is not being altered and i is in x[:-1].

9. What is the output of the following?

```
x = "abcdef"
i = "a"
while i in x:
    x = x[1:]
    print(i, end = " ")
```

a) a a a a a a

b) a

c) no output

d) error

View Answer

Answer: b
Explanation: The string x is being shortened by one charater in each iteration.

10. What is the output of the following?

```
x = "abcdef"
i = "a"
while i in x[1:]:
    print(i, end = " ")
```

a) a a a a a a

b) a

c) no output

d) error

View Answer

Answer: c
Explanation: i is not in x[1:].

Python Questions and Answers – While and For Loops – 3

This set of Tough Python Questions & Answers focuses on “While and For Loops”.

1. What is the output of the following?

```
x = 'abcd'
for i in x:
    print(i)
    x.upper()
```

a) a B C D

b) a b c d

c) A B C D

d) error

View Answer

Answer: b
Explanation: Changes do not happen in-place, rather a new instance of the string is returned.

2. What is the output of the following?

```
x = 'abcd'
for i in x:
    print(i.upper())
```

a) a b c d

b) A B C D

c) a B C D

d) error

View Answer

Answer: b
Explanation: The instance of the string returned by upper() is being printed.

3. What is the output of the following?

```
x = 'abcd'
for i in range(x):
    print(i)
```

a) a b c d

b) 0 1 2 3

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: range(str) is not allowed.

4. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    print(i)
```

a) a b c d

b) 0 1 2 3

c) error

d) 1 2 3 4

View Answer

Answer: b
Explanation: i takes values 0, 1, 2 and 3.

5. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    print(i.upper())
```

a) a b c d

b) 0 1 2 3

c) error

d) 1 2 3 4

View Answer

Answer: c
Explanation: Objects of type int have no attribute upper().

6. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    i.upper()
print (x)
```

a) a b c d

b) 0 1 2 3

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: Objects of type int have no attribute upper().

7. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    x[i].upper()
print (x)
```

a) abcd

b) ABCD

c) error

d) none of the mentioned

View Answer

Answer: a
Explanation: Changes do not happen in-place, rather a new instance of the string is returned.

8. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    i[x].upper()
print (x)
```

a) abcd

b) ABCD

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: Objects of type int aren't subscriptable. However, if the statement was x[i], an error would not have been thrown.

9. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    x = 'a'
    print(x)
```

a) a

b) abcd abcd abcd

c) a a a a

d) none of the mentioned

View Answer

Answer: c
Explanation: range() is computed only at the time of entering the loop.

10. What is the output of the following?

```
x = 'abcd'
for i in range(len(x)):
    print(x)
    x = 'a'
```

a) a

b) abcd abcd abcd abcd

c) a a a a

d) none of the mentioned

View Answer

Answer: d
Explanation: abcd a a a is the output as x is modified only after ‘abcd’ has been printed once.

Python Questions and Answers – While and For Loops – 4

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

1. What is the output of the following?

```
x = 123
for i in x:
    print(i)
```

a) 1 2 3

b) 123

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: Objects of type int are not iterable.

2. What is the output of the following?

```
d = {0: 'a', 1: 'b', 2: 'c'}
for i in d:
    print(i)
```

a) 0 1 2

b) a b c

c) 0 a 1 b 2 c

d) none of the mentioned

View Answer

Answer: a
Explanation: Loops over the keys of the dictionary.

3. What is the output of the following?

```
d = {0: 'a', 1: 'b', 2: 'c'}
for x, y in d:
    print(x, y)
```

a) 0 1 2

b) a b c

c) 0 a 1 b 2 c

d) none of the mentioned

View Answer

Answer: d
Explanation: Error, objects of type int aren’t iterable.

4. What is the output of the following?

```
d = {0: 'a', 1: 'b', 2: 'c'}
for x, y in d.items():
    print(x, y)
```

a) 0 1 2

b) a b c

c) 0 a 1 b 2 c

d) none of the mentioned

View Answer

Answer: c
Explanation: Loops over key, value pairs.

5. What is the output of the following?

```
d = {0: 'a', 1: 'b', 2: 'c'}
for x in d.keys():
    print(d[x])
```

a) 0 1 2

b) a b c

c) 0 a 1 b 2 c

d) none of the mentioned

View Answer

Answer: b
Explanation: Loops over the keys and prints the values.

6. What is the output of the following?

```
d = {0: 'a', 1: 'b', 2: 'c'}
for x in d.values():
    print(x)
```

a) 0 1 2

b) a b c

c) 0 a 1 b 2 c

d) none of the mentioned

View Answer

Answer: b
Explanation: Loops over the values.

7. What is the output of the following?

```
d = {0: 'a', 1: 'b', 2: 'c'}
for x in d.values():
    print(d[x])
```

a) 0 1 2

b) a b c

c) 0 a 1 b 2 c

d) none of the mentioned

View Answer

Answer: d
Explanation: Causes a KeyError.

8. What is the output of the following?

```
d = {0, 1, 2}
for x in d.values():
    print(x)
```

a) 0 1 2

b) None None None

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: Objects of type set have no attribute values.

9. What is the output of the following?

```
d = {0, 1, 2}
for x in d:
    print(x)
```

a) 0 1 2

b) {0, 1, 2} {0, 1, 2} {0, 1, 2}

c) error

d) none of the mentioned

View Answer

Answer: a
Explanation: Loops over the elements of the set and prints them.

10. What is the output of the following?

```
d = {0, 1, 2}
for x in d:
    print(d.add(x))
```

a) 0 1 2

b) 0 1 2 0 1 2 0 1 2 …

c) None None None

d) None of the mentioned

View Answer

Answer: c
Explanation: Variable x takes the values 0, 1 and 2. set.add() returns None which is printed.

11. What is the output of the following?

```
for i in range(0):
    print(i)
```

a) 0

b) no output

c) error

d) none of the mentioned

View Answer

Answer: b
Explanation: range(0) is empty.

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 – While and For Loops – 6

This set of Python Technical Questions & Answers focuses on “While/For Loops”.

1. What is the output of the following?

```
for i in range(10):
    if i == 5:
        break
    else:
        print(i)
else:
    print("Here")
```

a) 0 1 2 3 4 Here

b) 0 1 2 3 4 5 Here

c) 0 1 2 3 4

d) 1 2 3 4 5

View Answer

Answer: c
Explanation: The else part is executed if control doesn’t break out of the loop.

2. What is the output of the following?

```
for i in range(5):
    if i == 5:
        break
    else:
        print(i)
else:
    print("Here")
```

a) 0 1 2 3 4 Here

b) 0 1 2 3 4 5 Here

c) 0 1 2 3 4

d) 1 2 3 4 5

View Answer

Answer: a
Explanation: The else part is executed if control doesn’t break out of the loop.

3. What is the output of the following?

```
x = (i for i in range(3))
for i in x:
    print(i)
```

a) 0 1 2

b) error

c) 0 1 2 0 1 2

d) none of the mentioned

View Answer

Answer: a
Explanation: The first statement creates a generator object.

4. What is the output of the following?

```
x = (i for i in range(3))
for i in x:
    print(i)
for i in x:
    print(i)
```

a) 0 1 2

b) error

c) 0 1 2 0 1 2

d) none of the mentioned

View Answer

Answer: a
Explanation: We can loop over a generator object only once.

5. What is the output of the following?

```
string = "my name is x"
for i in string:
    print (i, end=", ")
```

a) m, y, , n, a, m, e, , i, s, , x,

b) m, y, , n, a, m, e, , i, s, , x

c) my, name, is, x,

d) error

View Answer

Answer: a
Explanation: Variable i takes the value of one character at a time.

6. What is the output of the following?

```
string = "my name is x"
for i in string.split():
    print (i, end=", ")
```

a) m, y, , n, a, m, e, , i, s, , x,

b) m, y, , n, a, m, e, , i, s, , x

c) my, name, is, x,

d) error

View Answer

Answer: c
Explanation: Variable i takes the value of one word at a time.

7. What is the output of the following?

```
a = [0, 1, 2, 3]
for a[-1] in a:
    print(a[-1])
```

a) 0 1 2 3

b) 0 1 2 2

c) 3 3 3 3

d) error

View Answer

Answer: b
Explanation: The value of a[-1] changes in each iteration.

8. What is the output of the following?

```
a = [0, 1, 2, 3]
for a[0] in a:
    print(a[0])
```

a) 0 1 2 3

b) 0 1 2 2

c) 3 3 3 3

d) error

View Answer

Answer: a
Explanation: The value of a[0] changes in each iteration. Since the first value that it takes is itself, there is no visible error in the current example.

9. What is the output of the following?

```
a = [0, 1, 2, 3]
i = -2
```

```
for i not in a:
    print(i)
    i += 1
```

a) -2 -1

b) 0

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: SyntaxError, not in isn't allowed in for loops.

10. What is the output of the following?

```
string = "my name is x"
for i in ' '.join(string.split()):
    print (i, end=", ")
```

a) m, y, , n, a, m, e, , i, s, , x,

b) m, y, , n, a, m, e, , i, s, , x

c) my, name, is, x,

d) error

View Answer

Answer: a
Explanation: Variable i takes the value of one character at a time.

Python Questions and Answers – Strings – 1

This set of Python Multiple Choice Questions & Answers (MCQs) focuses on "Strings – 1".

1. What is the output when following statement is executed ?

```
>>>"a"+"bc"
```

a) a

b) bc

c) bca

d) abc

View Answer

Answer: d
Explanation: + operator is concatenation operator.

2. What is the output when following statement is executed ?

```
>>>"abcd"[2:]
```

a) a

b) ab

c) cd

d) dc

View Answer

Answer: c
Explanation: Slice operation is performed on string.

3. The output of executing string.ascii_letters can also be achieved by:

a) string.ascii_lowercase_string.digits

b) string.ascii_lowercase+string.ascii_upercase

c) string.letters

d) string.lowercase_string.upercase

View Answer

Answer: b
Explanation: Execute in shell and check.

4. What is the output when following code is executed ?

```
>>> str1 = 'hello'
>>> str2 = ','
>>> str3 = 'world'
>>> str1[-1:]
```

a) olleh

b) hello

c) h

d) o

View Answer

Answer: d
Explanation: -1 corresponds to the last index.

5. What arithmetic operators cannot be used with strings ?

a) +

b) *

c) –

d) All of the mentioned

View Answer

Answer: c
Explanation: + is used to concatenate and * is used to multiply strings.

6. What is the output when following code is executed ?

```
>>>print r"\nhello"
```

The output is

a) a new line and hello

b) \nhello

c) the letter r and then hello

d) error

View Answer

Answer: b
Explanation: When prefixed with the letter ‘r’ or ‘R’ a string literal becomes a raw string and the escape sequences such as \n are not converted.

7. What is the output when following statement is executed ?

```
>>>print('new' 'line')
```

a) Error

b) Output equivalent to print ‘new\nline’

c) newline

d) new line

View Answer

Answer: c
Explanation: String literals seperated by white space are allowed. They are concatenated.

8. What is the output when following statement is executed ?

>>> print(‘x\97\x98’)

a) Error

b) 97

98

c) x\97

d) \x97\x98

View Answer

Answer: c
Explanation: \x is an escape sequence that means the following 2 digits are a hexadicmal number encoding a character.

9. What is the output when following code is executed ?

```
>>>str1="helloworld"
>>>str1[::-1]
```

a) dlrowolleh

b) hello

c) world

d) helloworld

View Answer

Answer: a
Explanation: Execute in shell to verify.

10. print(0xA + 0xB + 0xC) :

a) 0xA0xB0xC

b) Error

c) 0x22

d) 33

View Answer

Answer: d
Explanation: 0xA and 0xB and 0xC are hexadecimal integer literals representing the decimal values 10,11 and 12 respectively. There sum is 33.

Python Questions and Answers – Strings – 2

This set of Advanced Python Interview Questions & Answers focuses on “Strings”.

1. What is the output of the following code ?

```
class father:
    def __init__(self, param):
        self.o1 = param

class child(father):
    def __init__(self, param):
        self.o2 = param

>>>obj = child(22)
>>>print "%d %d" % (obj.o1, obj.o2)
```

a) None None

b) None 22

c) 22 None

d) Error is generated

View Answer

Answer: d
Explanation: self.o1 was never created.

2. What is the output of the following code ?

```
class tester:
    def __init__(self, id):
        self.id = str(id)
        id="224"

>>>temp = tester(12)
>>>print(temp.id)
```

a) 224

b) Error

c) 12

d) None

View Answer

Answer: c
Explanation: Id in this case will be the attribute of the class.

3. What is the output of the following code ?

```
>>>example = "snow world"
>>>print("%s" % example[4:7])
```

a) wo

b) world

c) sn

d) rl

View Answer

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

4. What is the output of the following code ?

```
>>>example = "snow world"
>>>example[3] = 's'
>>>print example
```

a) snow

b) snow world

c) Error

d) snos world

View Answer

Answer: c
Explanation: Strings cannot be modified.

5. What is the output of the following code ?

```
>>>max("what are you")
```

a) error

b) u

c) t

d) y

View Answer

Answer: d
Explanation: Max returns the character with the highest ascii value.

6. Given a string example=”hello” what is the output of example.count(l)

a) 2

b) 1

c) None

d) 0

View Answer

Answer: a
Explanation: l occurs twice in hello.

7. What is the output of the following code ?

```
>>>example = "helle"
>>>example.find("e")
```

a) Error

b) -1

c) 1

d) 0

View Answer

Answer: c
Explanation: returns lowest index .

8. What is the output of the following code ?

```
>>>example = "helle"
>>>example.rfind("e")
```

a) -1

b) 4

c) 3

d) 1

View Answer

Answer: b
Explanation: returns highest index.

9. What is the output of the following code ?

```
>>>example="helloworld"
>>>example[::-1].startswith("d")
```

a) dlrowolleh

b) True

c) -1

d) None

View Answer

Answer: b
Explanation: Starts with checks if the given string starts with the parameter that is passed.

10. To concatenate two strings to a third what statements are applicable ?

a) s3 = s1 . s2

b) s3 = s1.add(s2)

c) s3 = s1.__add__(s2)

d) s3 = s1 * s2

View Answer

Answer: c
Explanation: __add__ is another method that can be used for concatenation.

Python Questions and Answers – Strings – 3

This set of Python Technical Interview Questions & Answers focuses on “Strings”.

1. What is the output when following statement is executed ?

```
>>>chr(ord('A'))
```

a) A

b) B

c) a

d) Error

View Answer

Answer: a
Explanation: Execute in shell to verify.

2. What is the output when following statement is executed ?

```
>>>print(chr(ord('b')+1))
```

a) a

b) b

c) c

d) A

View Answer

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

3. Which of the following statement prints hello\example\test.txt ?

a) print(“hello\example\test.txt”)

b) print(“hello\\example\\test.txt”)

c) print(“hello\”example\”test.txt”)

d) print(“hello”\example”\test.txt”)

View Answer

Answer: b
Explanation: \is used to indicate that the next \ is not an escape sequence.

4. Suppose s is “\t\tWorld\n”, what is s.strip() ?

a) \t\tWorld\n

b) \t\tWorld\n

c) \t\tWORLD\n

d) World

View Answer

Answer: d
Explanation: Execute help(string.strip) to find details.

5. The format function, when applied on a string returns :

a) Error

b) int

c) bool

d) str

View Answer

Answer: d
Explanation: Format function returns a string.

6. What is the output of “hello”+1+2+3 ?

a) hello123

b) hello

c) Error

d) hello6

View Answer

Answer: c
Explanation: Cannot concantenate str and int objects.

7. What is the output when following code is executed ?

```
>>>print("D", end = ' ')
>>>print("C", end = ' ')
>>>print("B", end = ' ')
>>>print("A", end = ' ')
```

a) DCBA

b) A, B, C, D

c) D C B A

d) D, C, B, A will be displayed on four lines

View Answer

Answer: d
Explanation: Execute in the shell.

8. What is the output when following statement is executed ?(python 3.xx)

```
>>>print(format("Welcome", "10s"), end = '#')
>>>print(format(111, "4d"), end = '#')
>>>print(format(924.656, "3.2f"))
```

a)   Welcome# 111#924.66

b) Welcome#111#924.66

c) Welcome#111#.66

d) Welcome   # 111#924.66

View Answer

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

9. What will be displayed by print(ord('b') – ord('a')) ?

a) 0

b) 1

c) -1

d) 2

View Answer

Answer: b
Explanation: ASCII value of b is one more than a. Hence the output of this code is 98-97, which is equal to 1.

10. Say s="hello" what will be the return value of type(s) ?

a) int

b) bool

c) str

d) String

View Answer

Answer: c
Explanation: str is used to represent strings in python.

Python Questions and Answers – Strings – 4

This set of Python Coding Questions & Answers focuses on "Strings".

1. What is "Hello".replace("l", "e")

a) Heeeo

b) Heelo

c) Heleo

d) None

View Answer

Answer: a
Explanation: Execute in shell to verify.

2. To retrieve the character at index 3 from string s=”Hello” what command do we execute (multiple answers allowed) ?

a) s[].

b) s.getitem(3)

c) s.__getitem__(3)

d) s.getItem(3)

View Answer

Answer: c
Explanation: __getitem(..) can be used to get character at index specified as parameter.

3. To return the length of string s what command do we execute ?

a) s.__len__()

b) len(s)

c) size(s)

d) s.size()

View Answer

Answer: a
Explanation: Execute in shell to verify.

4. If a class defines the __str__(self) method, for an object obj for the class, you can use which command to invoke the __str__ method.

a) obj.__str__()

b) str(obj)

c) print obj

d) All of the mentioned

View Answer

Answer: d
Explanation: Execute in shell to verify.

5. To check whether string s1 contains another string s2, use

a) s1.__contains__(s2)

b) s2 in s1

c) s1.contains(s2)

d) si.in(s2)

View Answer

Answer: a
Explanation: s2 in s1 works in the same way as calling the special function __contains__ .

6. Suppose i is 5 and j is 4, i + j is same as

a) i.__add(j)

b) i.__add__(j)

c) i.__Add(j)

d) i.__ADD(j)

View Answer

Answer: b
Explanation: Execute in shell to verify.

7. What is the output of the following code ?

```
class Count:
    def __init__(self, count = 0):
       self.__count = count

c1 = Count(2)
c2 = Count(2)
print(id(c1) == id(c2), end = " ")

s1 = "Good"
s2 = "Good"
print(id(s1) == id(s2))
```

a) True False

b) True True

c) False True

d) False False

View Answer

Answer: c
Explanation: Execute in the shell objects cannot have same id, however in the case of strings its different.

8. What is the output of the following code ?

```
class Name:
    def __init__(self, firstName, mi, lastName):
        self.firstName = firstName
        self.mi = mi
        self.lastName = lastName

firstName = "John"
name = Name(firstName, 'F', "Smith")
firstName = "Peter"
name.lastName = "Pan"
print(name.firstName, name.lastName)
```

a) Peter Pan

b) John Pan

c) Peter Smith

d) John Smith

View Answer

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

9. What function do you use to read a string?

a) input(“Enter a string”)

b) eval(input(“Enter a string”))

c) enter(“Enter a string”)

d) eval(enter(“Enter a string”))

View Answer

Answer: a
Explanation: Execute in shell to verify.

10. Suppose x is 345.3546, what is format(x, “10.3f”) (_ indicates space)

a) __345.355

b) ___345.355

c) ____345.355

d) _____345.354

View Answer

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

Python Questions and Answers – Strings – 5

This set of Basic Python Questions & Answers focuses on “Strings”.

1. What is the output of the following?

```
print("abc DEF".capitalize())
```

a) abc def

b) ABC DEF

c) Abc def

d) Abc Def

View Answer

Answer: c
Explanation: The first letter of the string is converted to uppercase and the others are converted to lowercase.

2. What is the output of the following?

```
print("abc. DEF".capitalize())
```

a) abc. def

b) ABC. DEF

c) Abc. def

d) Abc. Def

View Answer

Answer: c
Explanation: The first letter of the string is converted to uppercase and the others are converted to lowercase.

3. What is the output of the following?

```
print("abcdef".center())
```

a) cd

b) abcdef

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: The function center() takes atleast one parameter.

4. What is the output of the following?

```
print("abcdef".center(0))
```

a) cd

b) abcdef

c) error

d) none of the mentioned

View Answer

Answer: c
Explanation: The entire string is printed when the argument passed to center() is less than the length of the string.

5. What is the output of the following?

```
print('*', "abcdef".center(7), '*')
```

a) * abcdef *

b) * abcdef *

c) *abcdef *

d) * abcdef*

View Answer

Answer: b
Explanation: Padding is done towards the left-hand-side first when the final string is of odd length. Extra spaces are present since we haven't overridden the value of sep.

6. What is the output of the following?

```
print('*', "abcdef".center(7), '*', sep='')
```

a) * abcdef *

b) * abcdef *

c) *abcdef *

d) * abcdef*

View Answer

Answer: d
Explanation: Padding is done towards the left-hand-side first when the final string is of odd length.

7. What is the output of the following?

```
print('*', "abcde".center(6), '*', sep='')
```

a) * abcde *

b) * abcde *

c) *abcde *

d) * abcde*

View Answer

Answer: c
Explanation: Padding is done towards the right-hand-side first when the final string is of even length.

8. What is the output of the following?

```
print("abcdef".center(7, 1))
```

a) 1abcdef

b) abcdef1

c) abcdef

d) error

View Answer

Answer: d
Explanation: TypeError, the fill character must be a character, not an int.

9. What is the output of the following?

```
print("abcdef".center(7, '1'))
```

a) 1abcdef

b) abcdef1

c) abcdef

d) error

View Answer

Answer: a
Explanation: The character ‘1’ is used for padding instead of a space.

10. What is the output of the following?

```
print("abcdef".center(10, '12'))
```

a) 12abcdef12

b) abcdef1212

c) 1212abcdef

d) error

View Answer

Answer: d
Explanation: The fill character must be exactly one character long.

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.

Python Questions and Answers – Strings – 7

This set of Online Python Quiz focuses on “Strings”.

1. What is the output of the following?

```
print("ab\tcd\tef".expandtabs())
```

a) ab cd ef

b) abcdef

c) ab\tcd\tef

d) ab cd ef

View Answer

Answer: a
Explanation: Each \t is converted to 8 blank spaces by default.

2. What is the output of the following?

```
print("ab\tcd\tef".expandtabs(4))
```

a) ab cd ef

b) abcdef

c) ab\tcd\tef

d) ab cd ef

View Answer

Answer: d
Explanation: Each \t is converted to 4 blank spaces.

3. What is the output of the following?

```
print("ab\tcd\tef".expandtabs('+'))
```

a) ab+cd+ef

b) ab++++++++cd++++++++ef

c) ab cd ef

d) none of the mentioned

View Answer

Answer: d
Explanation: TypeError, an integer should be passed as an argument.

4. What is the output of the following?

```
print("abcdef".find("cd") == "cd" in "abcdef")
```

a) True

b) False

c) Error

d) None of the mentioned

View Answer

Answer: b
Explanation: The function find() returns the position of the sunstring in the given string whereas the in keyword returns a value of Boolean type.

5. What is the output of the following?

```
print("abcdef".find("cd"))
```

a) True

b) 2

c) 3

d) None of the mentioned

View Answer

Answer: b
Explanation: The first position in the given string at which the substring can be found is returned.

6. What is the output of the following?

```
print("ccdcddcd".find("c"))
```

a) 4

b) 0

c) Error

d) True

View Answer

Answer: b
Explanation: The first position in the given string at which the substring can be found is returned.

7. What is the output of the following?

```
print("Hello {0} and {1}".format('foo', 'bin'))
```

a) Hello foo and bin

b) Hello {0} and {1} foo bin

c) Error

d) Hello 0 and 1

View Answer

Answer: a
Explanation: The numbers 0 and 1 represent the position at which the strings are present.

8. What is the output of the following?

```
print("Hello {1} and {0}".format('bin', 'foo'))
```

a) Hello foo and bin

b) Hello bin and foo

c) Error

d) None of the mentioned

View Answer

Answer: a
Explanation: The numbers 0 and 1 represent the position at which the strings are present.

9. What is the output of the following?

```
print("Hello {} and {}".format('foo', 'bin'))
```

a) Hello foo and bin

b) Hello {} and {}

c) Error

d) Hello and

View Answer

Answer: a
Explanation: It is the same as Hello {0} and {1}.

10. What is the output of the following?

```
print("Hello {name1} and {name2}".format('foo', 'bin'))
```

a) Hello foo and bin

b) Hello {name1} and {name2}

c) Error

d) Hello and

View Answer

Answer: c
Explanation: The arguments passed to the function format aren't keyword arguments.

Python Questions and Answers – Strings – 8

This set of Python Multiple Choice Questions and Answers focuses on "Strings".

1. What is the output of the following?

```
print("Hello {name1} and {name2}".format(name1='foo', name2='bin'))
```

a) Hello foo and bin

b) Hello {name1} and {name2}

c) Error

d) Hello and

View Answer

Answer: a
Explanation: The arguments are accessed by their names.

2. What is the output of the following?

```
print("Hello {0!r} and {0!s}".format('foo', 'bin'))
```

a) Hello foo and foo

b) Hello 'foo' and foo

c) Hello foo and ‘bin’

d) Error

View Answer

Answer: b
Explanation: !r causes the characters ‘ or ” to be printed as well.

3. What is the output of the following?

```
print("Hello {0} and {1}".format(('foo', 'bin')))
```

a) Hello foo and bin

b) Hello (‘foo’, ‘bin’) and (‘foo’, ‘bin’)

c) Error

d) None of the mentioned

View Answer

Answer: c
Explanation: IndexError, the tuple index is out of range.

4. What is the output of the following?

```
print("Hello {0[0]} and {0[1]}".format(('foo', 'bin')))
```

a) Hello foo and bin

b) Hello (‘foo’, ‘bin’) and (‘foo’, ‘bin’)

c) Error

d) None of the mentioned

View Answer

Answer: a
Explanation: The elements of the tuple are accessed by their indices.

5. What is the output of the following?

```
print('The sum of {0} and {1} is {2}'.format(2, 10, 12))
```

a) The sum of 2 and 10 is 12

b) Error

c) The sum of 0 and 1 is 2

d) None of the mentioned

View Answer

Answer: a
Explanation: The arguments passed to the function format can be integers also.

6. What is the output of the following?

```
print('The sum of {0:b} and {1:x} is {2:o}'.format(2, 10, 12))
```

a) The sum of 2 and 10 is 12

b) The sum of 10 and a is 14

c) The sum of 10 and a is c

d) Error

View Answer

Answer: b
Explanation: 2 is converted to binary, 10 to hexadecimal and 12 to octal.

7. What is the output of the following?

```
print('{:,}'.format(1112223334))
```

a) 1,112,223,334

b) 111,222,333,4

c) 1112223334

d) Error

View Answer

Answer: a
Explanation: A comma is added after every third digit from the right.

8. What is the output of the following?

```
print('{:,}'.format('1112223334'))
```

a) 1,112,223,334

b) 111,222,333,4

c) 1112223334

d) Error

View Answer

Answer: d
Explanation: An integer is expected.

9. What is the output of the following?

```
print('{:$}'.format(1112223334))
```

a) 1,112,223,334

b) 111,222,333,4

c) 1112223334

d) Error

View Answer

Answer: d
Explanation: $ is an invalid format code.

10. What is the output of the following?

```
print('{:#}'.format(1112223334))
```

a) 1,112,223,334

b) 111,222,333,4

c) 1112223334

d) Error

View Answer

Answer: c
Explanation: The number is printed as it is.

Python Questions and Answers – Strings – 9

This set of Python MCQs focuses on “Strings”.

1. What is the output of the following?

```
print('{0:.2}'.format(1/3))
```

a) 0.333333

b) 0.33

c) 0.333333:.2

d) Error

View Answer

Answer: b
Explanation: .2 specifies the precision.

2. What is the output of the following?

```
print('{0:.2%}'.format(1/3))
```

a) 0.33

b) 0.33%

c) 33.33%

d) 33%

View Answer

Answer: c
Explanation: The symbol % is used to represent the result of an expression as a percentage.

3. What is the output of the following?

```
print('ab12'.isalnum())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: The string has only letters and digits.

4. What is the output of the following?

```
print('ab,12'.isalnum())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: b
Explanation: The character , is not a letter or a digit.

5. What is the output of the following?

```
print('ab'.isalpha())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: The string has only letters.

6. What is the output of the following?

```
print('a B'.isalpha())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: b
Explanation: Space is not a letter.

7. What is the output of the following?

```
print('0xa'.isdigit())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: b
Explanation: Hexadecimal digits aren’t considered as digits (a-f).

8. What is the output of the following?

```
print(''.isdigit())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: b
Explanation: If there are no characters then False is returned.

9. What is the output of the following?

```
print('my_string'.isidentifier())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: It is a valid identifier.

10. What is the output of the following?

```
print('__foo__'.isidentifier())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: It is a valid identifier.

Python Questions and Answers – Strings – 10

This set of Python Test focuses on “Strings”.

1. What is the output of the following?

```
print('for'.isidentifier())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: Even keywords are considered as valid identifiers.

2. What is the output of the following?

```
print('abc'.islower())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: There are no uppercase letters.

3. What is the output of the following?

```
print('a@ 1,'.islower())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: There are no uppercase letters.

4. What is the output of the following?

```
print('11'.isnumeric())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: All the character are numeric.

5. What is the output of the following?

```
print('1.1'.isnumeric())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: b
Explanation: The character . is not a numeric character.

6. What is the output of the following?

```
print('1@ a'.isprintable())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: All those characters are printable.

7. What is the output of the following?

```
print(''''''.isspace())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: b
Explanation: None.

8. What is the output of the following?

```
print('\t'.isspace())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: Tabspaces are considered as spaces.

9. What is the output of the following?

```
print('HelloWorld'.istitle())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: b
Explanation: The letter W is uppercased.

10. What is the output of the following?

```
print('Hello World'.istitle())
```

a) True

b) False

c) None

d) Error

View Answer

Answer: a
Explanation: It is in title form.

Python Questions and Answers – Strings – 11

This set of Online Python Test focuses on “Strings”.

1. What is the output of the following?

```
print('Hello!2@#World'.istitle())
```

a) True

b) False

c) None

d) error

View Answer

Answer: a
Explanation: It is in the form of a title.

2. What is the output of the following?

```
print('1Rn@'.lower())
```

a) n

b) 1rn@

c) rn

d) r

View Answer

Answer: b
Explanation: Uppercase letters are converted to lowercase. The other characters are left unchanged.

3. What is the output of the following?

```
print('''
 \tfoo'''.lstrip())
```

a) \tfoo

b) foo

c) foo

d) none of the mentioned

View Answer

Answer: b
Explanation: All leading whitespace is removed.

4. What is the output of the following?

```
print('xyyzxxyxyy'.lstrip('xyy'))
```

a) error

b) zxxyxyy

c) z

d) zxxy

View Answer

Answer: b
Explanation: The leading characters containing xyy are removed.

5. What is the output of the following?

```
print('xyxxyyzxxy'.lstrip('xyy'))
```

a) zxxy

b) xyxxyyzxxy

c) xyxzxxy

d) none of the mentioned

View Answer

Answer: a
Explanation: All combinations of the characters passed as an argument are removed from the left hand side.

6. What is the output of the following?

```
print('cba'.maketrans('abc', '123'))
```

a) {97: 49, 98: 50, 99: 51}

b) {65: 49, 66: 50, 67: 51}

c) 321

d) 123

View Answer

Answer: a
Explanation: A translation table is returned by maketrans.

7. What is the output of the following?

```
print('a'.maketrans('ABC', '123'))
```

a) {97: 49, 98: 50, 99: 51}

b) {65: 49, 66: 50, 67: 51}

c) {97: 49}

d) 1

View Answer

Answer: a
Explanation: maketrans() is a static method so it’s behaviour does not depend on the object from which it is being called.

8. What is the output of the following?

```
print('abcdef'.partition('cd'))
```

a) (‘ab’, ‘ef’)

b) (‘abef’)

c) (‘ab’, ‘cd’, ‘ef’)

d) 2

View Answer

Answer: c
Explanation: The string is split into three parts by partition.

9. What is the output of the following?

```
print('abcdefcdgh'.partition('cd'))
```

a) (‘ab’, ‘cd’, ‘ef’, ‘cd’, ‘gh’)

b) (‘ab’, ‘cd’, ‘efcdgh’)

c) (‘abcdef’, ‘cd’, ‘gh’)

d) error

View Answer

Answer: b
Explanation: The string is partitioned at the point where the separator first appears.

10. What is the output of the following?

```
print('abcd'.partition('cd'))
```

a) (‘ab’, ‘cd’, ”)

b) (‘ab’, ‘cd’)

c) error

d) none of the mentioned

View Answer

Answer: a
Explanation: The last item is a null string.

Python Questions and Answers – Strings – 12

This set of Python Problems focuses on “Strings”.

1. What is the output of the following?

```
print('cd'.partition('cd'))
```

a) (‘cd’)

b) (”)

c) (‘cd’, ”, ”)

d) (”, ‘cd’, ”)

View Answer

Answer: d
Explanation: The entire string has been passed as the separator hence the first and the last item of the tuple returned are null strings.

2. What is the output of the following?

```
print('abef'.partition('cd'))
```

a) (‘abef’)

b) (‘abef’, ‘cd’, ”)

c) (‘abef’, ”, ”)

d) error

View Answer

Answer: c
Explanation: The separator is not present in the string hence the second and the third elements of the tuple are null strings.

3. What is the output of the following?

```
print('abcdef12'.replace('cd', '12'))
```

a) ab12ef12

b) abcdef12

c) ab12efcd

d) none of the mentioned

View Answer

Answer: a
Explanation: All occurences of the first substring are replaced by the second substring.

4. What is the output of the following?

```
print('abef'.replace('cd', '12'))
```

a) abef

b) 12

c) error

d) none of the mentioned

View Answer

Answer: a
Explanation: The first substring is not present in the given string and hence nothing is replaced.

5. What is the output of the following?

```
print('abcefd'.replace('cd', '12'))
```

a) ab1ef2

b) abcefd

c) ab1efd

d) ab12ed2

View Answer

Answer: b
Explanation: The first substring is not present in the given string and hence nothing is replaced.

6. What is the output of the following?

```
print('xyyxyyxyxyxxy'.replace('xy', '12', 0))
```

a) xyyxyyxyxyxxy

b) 12y12y1212x12

c) 12yxyyxyxyxxy

d) xyyxyyxyxyx12

View Answer

Answer: a
Explanation: The first 0 occurences of the given substring are replaced.

7. What is the output of the following?

```
print('xyyxyyxyxyxxy'.replace('xy', '12', 100))
```

a) xyyxyyxyxyxxy

b) 12y12y1212x12

c) none of the mentioned

d) error

View Answer

Answer: b
Explanation: The first 100 occurences of the given substring are replaced.

8. What is the output of the following?

```
print('abcdefcdghcd'.split('cd'))
```

a) [‘ab’, ‘ef’, ‘gh’].

b) [‘ab’, ‘ef’, ‘gh’, ”].

c) (‘ab’, ‘ef’, ‘gh’)

d) (‘ab’, ‘ef’, ‘gh’, ”)

View Answer

Answer: b
Explanation: The given string is split and a list of substrings is returned.

9. What is the output of the following?

```
print('abcdefcdghcd'.split('cd', 0))
```

a) [‘abcdefcdghcd’].

b) ‘abcdefcdghcd’

c) error

d) none of the mentioned

View Answer

Answer: a
Explanation: The given string is split at 0 occurances of the specified substring.

10. What is the output of the following?

```
print('abcdefcdghcd'.split('cd', -1))
```

a) [‘ab’, ‘ef’, ‘gh’].

b) [‘ab’, ‘ef’, ‘gh’, ”].

c) (‘ab’, ‘ef’, ‘gh’)

d) (‘ab’, ‘ef’, ‘gh’, ”)

View Answer

Answer: b
Explanation: Calling the function with a negative value for maxsplit is the same as calling it without any maxsplit specified. The string will be split into as many substring s as possible.

Python Questions and Answers – Strings – 13

This set of Python Question Bank focuses on “Strings”.

1. What is the output of the following?

```
print('abcdefcdghcd'.split('cd', 2))
```

a) [‘ab’, ‘ef’, ‘ghcd’].

b) [‘ab’, ‘efcdghcd’].

c) [‘abcdef’, ‘ghcd’].

d) none of the mentioned

View Answer

Answer: a
Explanation: The string is split into a maximum of maxsplit+1 substrings.

2. What is the output of the following?

```
print('ab\ncd\nef'.splitlines())
```

a) [‘ab’, ‘cd’, ‘ef’].

b) [‘ab\n’, ‘cd\n’, ‘ef\n’].

c) [‘ab\n’, ‘cd\n’, ‘ef’].

d) [‘ab’, ‘cd’, ‘ef\n’].

View Answer

Answer: a
Explanation: It is similar to calling split(‘\n’).

3. What is the output of the following?

```
print('Ab!2'.swapcase())
```

a) AB!@

b) ab12

c) aB!2

d) aB1@

View Answer

Answer: c
Explanation: Lowercase letters are converted to uppercase and vice-versa.

4. What is the output of the following?

```
print('ab cd ef'.title())
```

a) Ab cd ef

b) Ab cd eF

c) Ab Cd Ef

d) None of the mentioned

View Answer

Answer: c
Explanation: The first letter of every word is capitalized.

5. What is the output of the following?

```
print('ab cd-ef'.title())
```

a) Ab cd-ef

b) Ab Cd-ef

c) Ab Cd-Ef

d) None of the mentioned

View Answer

Answer: c
Explanation: The first letter of every word is capitalized. Special symbols terminate a word.

6. What is the output of the following?

```
print('abcd'.translate('a'.maketrans('abc', 'bcd')))
```

a) bcde

b) abcd

c) error

d) bcdd

View Answer

Answer: d
Explanation: The output is bcdd since no translation is provided for d.

7. What is the output of the following?

```
print('abcd'.translate({97: 98, 98: 99, 99: 100}))
```

a) bcde

b) abcd

c) error

d) none of the mentioned

View Answer

Answer: d
Explanation: The output is bcdd since no translation is provided for d.

8. What is the output of the following?

```
print('abcd'.translate({'a': '1', 'b': '2', 'c': '3', 'd': '4'}))
```

a) abcd

b) 1234

c) error

d) none of the mentioned

View Answer

Answer: a
Explanation: The function translate expects a dictionary of integers. Use maketrans() instead of doing the above.

9. What is the output of the following?

```
print('ab'.zfill(5))
```

a) 000ab

b) 00ab0

c) 0ab00

d) ab000

View Answer

Answer: a
Explanation: The string is padded with zeroes on the left hand side. It is useful for formatting numbers.

10. What is the output of the following?

```
print('+99'.zfill(5))
```

a) 00+99

b) 00099

c) +0099

d) +++99

View Answer

Answer: c
Explanation: Zeroes are filled in between the first sign and the rest of the string.