

Assignment -1

1) REPL stands for:

- READ, EDIT, PRINT, LOOP
- RETRIEVE, EVALUATE, PRINT, LOOP
- READ, EVALUATE, PRINT, LOOP
- None of the above

2) What is not true about the `bind()` method in Tkinter GUI Widget library?

- It is an event handler function
- It associates event handler with GUI widget
- It recognizes GUI event type and invokes the corresponding callback function.
- None of the above statements are true

3) What should you use to execute the Python statement and see the output?

- REPL
- IDLE
- Jupyter Notebook
- Visual Studio

4) Which of the following function is used to display the output?

- `output()`
- `print()`
- `display()`
- `show()`

5) Which of the following functions is used to get the user's input?

- `get()`
- `prompt()`
- `input()`
- `get_input()`

6) Which of the following defines a variable in Python?

- `var name="Steve"`
- `string name="Steve"`
- `name="Steve"`
- All of the above

7) How to get the type of the following variable?

`i=10`

- `type(i)`
- `exec(i)`
- `print(i)`
- `help(i)`

8) What is the output of the following code?

```
>>> x=100>>> type(x)
```

- `integer`
- `int`
- `<class 'int'>`
- `<class 'number'>`

9)What is the output of the following code?

```
>>> x='Hello ' >>> y='World' >>> x+y
```

- An error will be raised.
- 'Hello World'
- 'Hello '
- 'World'

10)What is the output of the following code?

```
>>> x='Hello '  
>>> y='World2'  
>>> x+y
```

- An error will be raised.
- 'Hello World2'
- 'Hello '
- 'World'

Assignment -2:-

1: Scientific notation for float number 0.0001234 is _____

- 1234e-10
- 1.234e-04
- 0.1234E-6
- None of the above

2: What is true about complex numbers?

- The real and imaginary component can be float
- The real part should be an integer.
- Scientific notation cannot be used in complex number
- All of above

3: The `int()` function can be useful to convert

- string to Integer
- hexadecimal to integer
- float to int
- Complex number to int

4: What is the value of the following arithmetic expression `5*2**10`?

- 100
- 5120
- 10000000000
- None of the above

5: Which of the following is true?

- `9%2=4`
- `9//2=4`
- `9/2=4`
- None of the above

6 Given `s='Hello. How are you?'`, which of the following expression will return `'How'`?

- `s[8:10]`
- `s[7:10]`
- `s[7:9]`

7: Which of the following will result in True?

- `'0x12'.isdigit()`
- `'12.0'.isdigit()`
- `'012'.isdigit()`
- `'1.2e01'.isdigit()`

8: Which function should be used to change `'how are you?'` to `'How Are You?'`,

- `capitalize()`
- `title()`
- `lower()`
- `upper()`

9: Which symbol is not defined as a string operator?

- `+`
- `-`
- `*`
- `None of these`

10: The `find('H')` function over a string `'TutorialsTeacher'` will return _____.

- `7`
- `0`
- `-1`
- `8`

Assignment -3:-

1: Logical AND operator returns True if

- Both operands are true
- Either operand is true
- Both operands are false
- None of the above

2: Which of the following operators checks the equality of two operands?

- =
- ==
- Both
- None

3: Operands of the logical operator may be of which type?

- Numeric
- Boolean
- String
- All of the above

4: Which of the following statements will be executed by Python interpreter without error?

- if age>=18
- if age=18:
- if age>=18:
- none of the above

5: Which of the following statements is not true?

- It is necessary to use 'else' whenever 'if' is used in a program.
- All statements in a block have the same indent.
- An indented block should be started after : symbol.
- All statements are true.

6: Which of the following statements is true regarding the body of the loop?

- It is a block of one or more statements.
- Statements in the block have the similarly increased indent
- It is executed for each iteration
- All of the above

7: Which of the following Python objects is not iterable?

- String
- Dictionary
- Number
- Tuple

8: The range(5) function generates which of following sequence of numbers:

- 0,1,2,3,4
- 1,2,3,4,5
- 1,2,3,4
- 0,1,2,3,4,5

9: What will be the output of the following code?

```
for char in 'Hello':  
    print (char,end=",")
```

- Hello
- H,e,l,l,o
- o,l,l,e,H
- Error

10: The `else` keyword can be used along with which of the following?

- for
- while
- if
- all of the above

Assignment -4:-

1: What will be the output of the following code?

```
a=10def myfunction():  
    a=20  
    return print('a=',a)
```

- a=20
- a=10
- Syntax error
- Value error

2: What is not true about formal and actual parameters?

- Their Number and type must match
- Need not be given in same order
- Their names must be identical
- All statements are true

3: In Python, functions are

- Always called by passing reference
- Always called by passing value
- May be called by passing reference or value
- None of these

4: Variable used inside a function become its

- Local variable
- Global variable
- Reference variable
- None of these

5: What is true about the docstring of a function?

- It is a string written as the first line in function block.
- It can be written in single, double, or triple quotes.
- It is ignored by the interpreter.
- All of the above.

6: What are the dunder (magic) methods in Python?

- Methods that start with a double underscore.
- Methods that start and end with a double underscore
- Methods that start with a single underscore
- Methods that start and end with a single underscore

7: What is true about the `__init__()` method?

- It is a constructor
- It is a magic method
- It calls `__new__()` method
- All of the above

8: The `__new__()` method _____.

- Creates a new object
- Initializes instance variables
- Both a and b
- acts as constructor

9: The `__add__()` method _____.

- Returns addition of two numbers
- Overloads + operator
- Should be overridden to overload + operator
- B and c

10: In order to overload `==` operator, which magic method must be overridden?

- `__comp__()`
- `__eq__()`
- `__equal__()`
- `__ne__()`

Assignment -5:-

1: Python modules are stored in which type of file?

- .txt file
- .md file
- .py file
- .python file

2: Which of these is not a built-in module in Python distribution?

- math
- os
- random
- pi

3: Built-in modules in Python are written in

- C
- C++
- Python
- Java

4: What will print (randrange(1,10)) statement do?

- Prints numbers from 1 to 10
- Print numbers 1 to 10 in random order
- Prints any one number from 1 to 9 selected randomly
- Print numbers from 1 to 9

5: Which of the following statement is incorrect?

- `log()` function returns natural logarithm of a number
- `log10()` function returns the standard logarithm of a number
- `log10()` function returns log value of 10
- all statements are incorrect

6: The following is an example of _____.

```
def getcol(x):
    for i in range(x):
        yield i
```

- Void Function
- Generator function
- **Iterator function**
- Yield function

7: What will be the output of the following code?

```
import collections
```

```
c=collections.Counter([1,2,2,3,3,4,4,4,4,5])print(c.most_common(1))
```

- **[(4, 4)]**
- [(2, 2)]
- [(4, 4), (2, 2)]
- Error

8: Is the following class valid?

```
class Employee:
    empid=0
    name=""
    def __init__(id,name):
        empid=id
        name=name
```

- **Yes**
- No

9: A class may contain

- attributes
- methods
- properties
- constructor
- instance attributes
- module
- package

10: What is TRUE about the class attributes?

- They are defined in the `__init__()` method.
- They can be defined inside any method.
- They are accessible by the name of the class.
- All of the above are true.

11: What is 'self' in Python?

- What is 'self' in Python?
- It is a keyword.
- It is a class attribute.
- It is a reference to an object which calls an instance method.
- It is a built-in function in Python

12: What is the name of the constructor method in the Python class?

- `__main__()`
- `__init__()`
- `__ctor__()`
- None of the above

13: Which of the following statement is correct?

- Class attributes are the variables defined directly in the class that is shared by all objects of the class.
- Class attributes are the variables defined inside the class method.
- Class attributes are objects of the class.

- None of the above

Assignment -6:-

1: The mechanism of designing a new class based on one or more existing classes is called:

- Overriding
- Inheritance
- Polymorphism
- None of these

2: What is overriding?

- Overriding can occur in the case of inheritance of classes.
- It is a process of redefining inherited method in child class
- It is a magic method in Python
- None of these

3: What kind of relationship exists between inherited class and base class?

- IS A
- HAS A
- Both
- None

4: What is not true about overriding in Python?

- Redefining a base class method in the inherited class is called method overriding.
- Overriding is the essential feature of object-oriented language.
- The overridden methods must have the same number of arguments as the base class method of the same name.
- All the above statements are true.

5: Instance variables and methods in the Python class are:

- Private by default
- Public by default
- Protected by default
- These terms are not applicable in Python.

6: Which of the following is not the built-in error type?

- EOFError
- IndexError
- KeyError
- LoopError

7: What type of error will be raised when the imported module is not found?

- NullError
- NameError
- ImportError
- ReferenceError

8: What will be the output of the following code?

```
def fn(x):  
    try:  
        print(5/x)  
    except:  
        print('Error occurred')  
fn(0)
```

- 5
- 0.0
- Error occurred
- ZeroDivisionError: division by zero

9: What will be the output of the following code?

```
def fn(x):  
    try:  
        print(5/x)  
    except ZeroDivisionError:  
        print("except block")  
    else:  
        print("else block")  
    finally:  
        print("finally block")  
fn(0)
```

- Except block
- Except block
- SyntaxError
- ValueError

10: Which of the following keyword is used to raise an error in Python?

- except
- raise
- throw
- throw Except()

Assignment -7:-

1: Which of the following is mutable?

- List
- String
- Tuple
- Set

2: A list can contain _____ elements.

- Unlimited (depends on computer's memory)
- 10000
- 1 Million
- 10 Million

3: What will be the output of the following code?

```
nums=list({1: 'one', 2: 'two'})  
print(nums)
```

- Syntax Error
- [1, 2]
- ['one', 'two']
- Runtime error

4: Which of the following is an invalid list object?

- list("Hello")
- [10, 1.234, 2+3j, 'Python']
- [(1,2), (3,4)]
- All are valid

5: The list.pop() function will

- remove the first element from a list
- remove the last element from a list
- none will be removed
- both will be removed

6: What will be the output of the following code?

```
s = set('Hello')  
print(s)
```

- Syntax error
- {"H", 'e', 'l', 'o'}
- {"H", 'e', 'l', 'l', 'o'}

7: What will be the output of the following code?

```
s1={1,2,3,4,5}  
s2={4,5,6,7,8}  
print(s1-s2)
```

- {1,2,3}
- {8,6,7}
- Syntax error
- Runtime error

8: What will be the output of the following program?

```
s1={1,2,3,4,5}  
s2={4,5,6,7,8}  
print(s1|s2)
```

- {1, 2, 3, 4, 5}
- {4, 5, 6, 7, 8}
- {1, 2, 3, 4, 5, 6, 7, 8}
- Syntax error
- Runtime error

9: What will be the output of the following code?

```
>>> emp = {}  
>>> type(emp)
```

- <class 'set'>
- <class 'dict'>
- <class ''>
- <class 'emp'>

10: How to convert a tuple to a set object?

- Using set() method

- Using tuple() method
- Using type() method
- Using set.convert() method

Assignment -8:-

1: Which of the following statements is true?

- Dictionary is a sequence of key-value pairs.
- Dictionary is an indexed collection of key-value pairs.
- Dictionary is an unordered collection of key-value pairs
- None of these

2: Which of following objects is not a valid declaration for dictionary?

- dict = {(1,2):10}
- dict=[1, 2]:10}
- dict={1:10}
- None of the above

3: To delete a key value pair in dictionary, use _____.

- del() method
- pop() method
- del keyword
- remove()

4: The items() method of dictionary returns _____.

- list of tuples
- tuple of lists
- tuple of tuples
- list of lists

5: What will be the output of the following code?

```
nums = {"ONE":1, "TWO":2}print(nums["One"])
```

- 1
- "ONE"
- Syntax error

- Runtime Error

6: `years={1995:'Java', 1972:'C', 1994:'Python'}` is a dictionary with key-value pairs of the year of invention and name of a language. The expression `list(years)` will return _____.

- list of years
- list of languages
- list of tuples each having year and language
- none of these

7: What will be the output of the following code?

```
years={1995:'Java', 1972:'C', 1994:'Python'}  
print(years.get(2000))
```

- ValueError
- SyntaxError
- Blank output
- Java

Assignment -9:-

1: Which of the following modes are not valid for opening a file to read and write?

- r+
- w+
- wb+
- rw

2: which of the following built-in function is used to get the file object for a particular file?

- file()
- object()
- open()
- read()

3: What does the following statement do?

```
f = open("C:\MyFile.txt", '+')
```

- Opening a file for appending texts.
- Opening a file for reading or writing.
- Opening a file for reading.
- Opening a file for writing texts.

4: What does the following code do?

```
f = open('C:\myfile.txt')  
c = f.read()
```

- Reading a line from the myfile.txt.
- Reading content from the myfile.txt until EOF.
- Open the file and point to the first line of the myfile.txt.
- Reading binary file.

5: The `rollback()` method should be executed to _____.

- Undo effect of SQL query
- Reset table
- Delete all records in a table
- Sort rows in descending order

Assignment -10:-

1: The character * is used in _____.

- SELECT query
- Insert Query
- Delete query
- All of the above

2: Python DB-API

- Is a Python module
- Specification for database connectivity modules
- is used to access SQLite database
- None of these

3: What is a cursor in the context of database programming?

- It is an indicator showing the current position for user interaction on a computer monitor.
- It acts as a handle for a given SQL query using which records are traversed.
- It stores the list of rows in a table.
- None of these

4: Which of the following statements is true about connect() function

- Creates a new database or opens the existing database
- Is Function in SQLite3 module
- Returns connection object
- All of above

5: Commit() method should be executed to

- Finalize transactions
- Close database
- Close table
- Refresh data after execution of the query

