

1. Difference in virtual environment in pip vs conda.
2. Differentiate between mutable and immutable data type
3.
 - What happens if a local variable exists with the same name as the global variable you want to access?
 - a) Error
 - b) The local variable is shadowed
 - c) Undefined behavior
 - d) The global variable is shadowed
- 4.
10. What will be the output of the following Python code?

```
def find(a, **b):  
    print(type(b))  
    find('letters', A='1', B='2')
```

- a) String
- b) Tuple
- c) Dictionary

5.

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

```
for i in range(0,2,-1):  
  
    print("Hello")
```

- A. Hello
- B. Hello Hello
- C. No Output
- D. Error

6.

A while loop in Python is used for what type of iteration?

- A. indefinite
- B. discriminant
- C. definite
- D. indeterminate

7. What happens if the base condition isn't defined in recursive programs?

- a) Program gets into an infinite loop
- b) Program runs once
- c) Program runs n number of times where n is the argument given to the function
- d) An exception is thrown

8.

```
def dec_func(func):  
    def in_func(*args):  
        for i in args:  
            print(i)  
            print(func(*args)**2)  
        return in_func
```

```
@dec_func  
def func(n):  
    return n//2
```

```
func(8)
```

What will be the output?

9.

What is closure in the context of decorators?

10.

Return type of *args and **kwargs?

11. What is the difference between a lambda function and a generator expression in Python?

12.

If return statement is not used inside the function, the function will return:

- A. None
- B. 0
- C. Null
- D. Arbitrary value

13.

When will the else part of try-except-else be executed?

- a) always
- b) when an exception occurs
- c) when no exception occurs

14. Which method is used to sets the position of a file pointer

15.

Which of the following statements are true?

- a) When you open a file for reading, if the file does not exist, an error occurs
- b) When you open a file for writing, if the file does not exist, a new file is created
- c) When you open a file for writing, if the file exists, the existing file is overwritten with the new file
- d) All of the mentioned

16.

What will be the output of the following Python code?

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

17.

What is the command used to delete a branch?

18. Differentiate between git pull and git fetch.

19. When should we choose git merge and git rebase?

20. How to revert back bad commit?