

1. What is inheritance?
2. What is polymorphism?
3. Types of inheritance and explain in detail?
4. What is Abstraction?
5. Why do we use abstraction?
6. Do abstract classes have objects?
7. Difference between object and instance
8. Difference between lists and tuples.
9. [1, 2, 3, (1, 2, 3)]
  - i. can i add 7 in this list?
  - ii. Can i add 4 in (1, 2, 3)
  - iii. If yes or no in both cases, then why?
10. (1, 2, 3, [1, 2, 3])
  - i. can i add 7 in this list?
  - ii. Can i add 4 in (1, 2, 3)
  - iii. If yes or no in both cases, then why?
11. What are pass by reference and pass by value?
12. A = 10

```
def num(n):
    n = 100
    return n
```

A = 1
B = num(A)
Print (A)

What will be the value of A after the execution of code?

13. What are the maps in python?
14. What are descriptors?
15. N1 = 10
N2 = 5

Write a function which will take any one of the numbers and it should return the value of other number, without using the condition statements.

MYSQL:

1. What is SQL?
2. Difference between SQL and NoSQL dbs.
3. What is MongoDB?

4. How is data stored in MongoDB?
5. What are all types of relations made between tables?
6. Write a scenario which will use all type of relations.
7. How does many to many relations made?
8. How can we retrieve info in many to many?
9. How will we solve many to many relation problems?
10. How will bridge table solve the issue and retrieve the info?
11. How will we fetch info from tables?
12. How will foreign key and primary key fetch info?
13. What is indexing? Why do we use it?
14. What are joins?
15. How does the data in left join look like?
16. Write a query to fetch the names of employees who work in IT department,  
where:  
Emp: emp\_id, emp\_name, dept\_id  
Dept: dept\_id, dept\_name
17. Now write the query using a join.

## Django

1. How does it answer to any request?
2. What is the type of code in each file of django project and app?

## API:

1. How does it answer to any request?
2. Difference between get and post?
3. How does post ask for data?
4. From where does the post requests in code structure?