

Question 1

Not yet answered

Marked out of 1.00

Flag question

Do you consider writing unit tests as equally important as writing production code?

Select one:

- ☐ No, production code is more important. Unit tests are only needed if the production code is of poor quality
- ☐ No, production code is more important. Unit tests should only be created if time allows for that.
- ☐ Yes because the only way to easily maintain correctly working production code is by having a lot of unit tests for it.

☒ Yes and production code must be 100% covered with unit tests.

Question 2

Not yet answered

Marked out of 1.00

Flag question

Given the code fragment:

```
1 System.out.println(2 + 4 * 9 - 3);
2 System.out.println((2 + 4) * 9 - 3);
3 System.out.println(2 + (4 * 9) - 3);
4 System.out.println(2 + 4 * (9 - 3));
5 System.out.println((2 + 4 * 9) - 3);
```

Which line of code prints the highest number?

Select one:

- ☐ Line 1
- ☒ Line 2
- ☐ Line 3
- ☐ Line 4
- ☐ Line 5

Question 3

Not yet answered

Marked out of 1.00

Flag question

Which of the numbered code snippets below is a valid way to handle more than one type of exception without duplicating the code?

```
catch (IOException ex) {
    logger.log(ex);
    throw ex;
}
catch (SQLException ex) {
    logger.log(ex);
    throw ex;
}
```

I

```
catch (IOException|SQLException ex) {
    logger.log(ex);
    throw ex;
}
```

II

```
catch (IOException/SQLException ex) {
    logger.log(ex);
    throw ex;
}
```

III

```
catch (IOException ex, SQLException ex) {
    logger.log(ex);
    throw ex;
}
```

IV

```
catch (IOException & SQLException ex) {
    logger.log(ex);
    throw ex;
}
```

V

Select one:

☐ I

☒ II

☐ III

☐ IV


☐ V



Question 4

Not yet answered

Marked out of 1.00

 Flag question

John is writing a new class. That class has 5 methods but one of those methods (method A) has some fundamental logic that John doesn't want to be overridden by any subclass. What should John do ?


Select one:

- ☐ a. define the class as final
- ☒ b. defined method A as final
- ☐ c. there is nothing that he can do about
- ☐ d. defined method A as static

Question 5

Not yet answered

Marked out of 1.00

 Flag question

A subclass of which of the following classes should be used when trying to read data from a text file?


Select one:

- ☐ File
- ☐ InputStream
- ☐ OutputStream
- ☒ Reader

**Question 6**

Not yet answered

Marked out of 1.00

 Flag question

Which of the following is the root class (apex) of the exception heirarchy in Java?


Select one:

- ☒ Throwable
- ☐ Exception
- ☐ Error
- ☐ RuntimeException

Question 7

Not yet answered

Marked out of 1.00

 Flag question

Which of the following statements best describes the difference between *java.util.Date* and *java.sql.Date*?


Select one:

- ☐ There is no difference; they both hold the same information.
- ☒ *java.sql.Date* represents the date without time information.
- ☐ *java.sql.Date* does not exist.
- ☐ *java.sql.Date* holds information in nanoseconds.
- ☐ *java.sql.Date* holds the database's time zone information.

Question 8

Not yet answered

Marked out of 1.00

 Flag question

Which of the following prefixes can be added to a number in order to indicate a binary literal?


Select one or more:

- ☒ 0b
- ☒ 0B
- ☐ oA
- ☐ 0S
- ☐ 0s

Question 9

Not yet answered

Marked out of 1.00

 Flag question

Which of the following phrases best describes what would happen if you attempted to compile and run code that calls the method in the snippet below on Java 7?

```
public String getSeasonUsingSwitchStatement(String seasonOfYearArg) {  
    String nameOfSeason;  
    switch (seasonOfYearArg) {  
        case "March":  
        case "April":  
        case "May":  
            nameOfSeason = "Spring";  
            break;  
        case "June":  
        case "July":  
        case "August":  
            nameOfSeason = "Summer";  
            break;  
        case "September":  
        case "October":  
        case "November":  
            nameOfSeason = "Autumn";  
            break;  
        case "December":  
        case "January":  
        case "February":  
            nameOfSeason = "Winter";  
            break;  
        default:  
            throw new IllegalArgumentException("Invalid month for season of the year:" + seasonOfYearArg);  
    }  
    return nameOfSeason;  
}
```


Select one:

- ☐ compilation error, because the switch statement does not call the getSeasonUsingSwitchStatement() method
- ☐ compilation error, because a String object is used in the expression of the switch statement
- ☐ compilation error, because IllegalArgumentException is used instead of java.lang.Exception
- ☐ compilation error because the variable nameOfSeason may not have been initialized
- ☒ none of the above, the code will compile correctly

**Question 10**

Not yet answered

Marked out of 1.00

 Flag question

We've deployed new release on the production. And it became very slow. What are your suggestion how to analyze and find bottleneck?

Select one or more:


- ☒ Check the logs
- ☐ Run with profiler
- ☐ Turn on monitoring tools
- ☐ Enable debug logging
- ☐ Add more instances to the cluster
- ☐ Call SaasOps
- ☒ Check the difference in source code from previous version
- ☐ Pray your favorite God.



Question 11

Not yet answered

Marked out of 1.00

 Flag question

From the perspective of a Java generational garbage collector, all new objects are considered to be part of:


Select one:

- ☐ old generation
- ☒ new generation
- ☐ PermGen
- ☐ Metaspace

Question 12

Not yet answered

Marked out of 1.00

 Flag question

If you need to find one item in a large unsorted collection but only once. What is faster way?


Select one:

- ☒ Sort the collection using quick sort and get the element by binary search
- ☐ Iterate through all entries and compare each item

Question 13

Not yet answered

Marked out of 1.00

 Flag question

We can improve the performance of a system in which we are reading data at a much higher rate than writing it by using:


Select one:

- ☐ a. a load balancer
- ☐ b. database replication
- ☐ c. database partitioning
- ☒ d. caching

Question 14

Not yet answered

Marked out of 1.00

 Flag question

What will happen if you try to compile and run this program?

```
public class Inc {
    public static void main(String[] args) {
        int[] i = {1};
        Inc in = new Inc();
        in.increment(i);

        System.out.println(i[i.length - 1]);
    }

    void increment(int[] i) {
        i[i.length - 1]++;
    }
}
```


Select one:

- ☐ Compiler error
- ☒ Compiles and runs printing out 2
- ☐ Compiles and runs printing out 1
- ☐ An ArrayIndexOutOfBoundsException at runtime

Question 15

Not yet answered

Marked out of 1.00

 Flag question

Which of the following items is the correct lambda expression for testing string nullability?


Select one:

- ☒ (value) -> value != null;
- ☐ (value) => value != null;
- ☐ [String value] -> value != null;
- ☐ (auto value) -> value != null;

**Question 16**

Not yet answered

Marked out of 1.00

 Flag question

Assuming no object exists in the pool, how many objects would be created from the following statements?

```
String s1 = new String("123");  
String s2 = "123";  
String s3 = "123";  
String s4 = s2;
```


Select one:

- ☐ 1
- ☒ 2
- ☐ 3
- ☐ 4

Question 17

Not yet answered

Marked out of 1.00

 Flag question

Which data structure can be used for storing a set of integers such that each of the following operations can be done in $O(\log N)$ time, where N is the number of elements?

- deletion of the smallest element
- insertion of an element if it is not already present in the set


Select one:

- ☐ A heap can be used, but not a balanced binary search tree
- ☐ A balanced binary search tree can be used, but not a heap
- ☒ Both balanced binary search tree and heap can be used
- ☐ Neither balanced binary search tree nor heap can be used

Question 18

Not yet answered

Marked out of 1.00

 Flag question

A situation where a bunch of threads cannot gain regular access to shared resources is described as:


Select one:

- ☐ Race conditions
- ☐ Livelock
- ☐ Deadlock
- ☒ Starvation

Question 19

Not yet answered

Marked out of 1.00

 Flag question

Which method below is responsible for restarting a Thread?


Select one:

- ☐ start();
- ☐ run();
- ☐ resume();
- ☒ none of the above

**Question 20**

Not yet answered

Marked out of 1.00

 Flag question

Which of these statements are true?


Select one:

- ☐ Objects can explicitly be destroyed using the delete keyword.
- ☐ An object will be garbage collected immediately after the last reference to the object is removed.
- ☐ If object obj1 is accessible from obj2 and obj2 is accessible from obj1, then obj1 and obj2 are not eligible for garbage collection.
- ☐ Once an object has become eligible for garbage collection, it will remain eligible until it is destroyed.
- ☒ The finalize() method will be invoked at most once on an object.

**Question 21**

Not yet answered

Marked out of 1.00

 Flag question

Which of the following items below is correct about Java 8?


Select one:

- ☐ Functional interfaces can have many abstract methods
- ☐ Default methods add new functionalities to interfaces with no backward compatibility
- ☒ Method references enable executing methods by their names instead of calling them directly
- ☐ There are five kinds of method references

Question 22

Not yet answered

Marked out of 1.00

 Flag question

Which of the following statements are correct?


Select one or more:

- ☒ A List stores elements in a Sorted Order.
- ☐ A Set keeps the elements sorted and a List keeps the elements in the order they were added.
- ☐ A SortedSet keeps the elements in the order they were added.
- ☒ An OrderedSet keeps the elements sorted.
- ☐ An OrderedList keeps the elements ordered.
- ☐ A NavigableSet keeps the elements sorted.

Question 23

Not yet answered

Marked out of 1.00

 Flag question**Which of the following is/are true about client-side caching in regards to RESTful web services?**


Select one or more:

- ☒ a. Client-side caching refers to storing responses from a server in the client itself so that a client does not need to make a server request for the same resource(s) repeatedly.
- ☒ b. The server response should include information about whether caching should be performed.
- ☐ c. Only the client should determine if a specific resource should be cacheable or not (Most commonly done by HTTP method).
- ☒ d. The server response should include data on how long the client should cache each resource.
- ☐ e. Only clients should determine how long of a cache is appropriate for a given resource based on client needs.

Question 24

Answer saved

Marked out of 1.00

 Flag question**Which of the following is/are true about REST? (Select all that apply)**


Select one or more:

- ☒ a. REST is a protocol
- ☐ b. REST allows the use of different data formats (e.g. JSON, XML)
- ☐ c. REST supports WS-Security
- ☒ d. REST has better performance and scalability over SOAP

Question 25

Answer saved

Marked out of 1.00

 Flag question

Let's consider that we have a REST web service for handling interview questions deployed at <http://interview-questions.com>. What HTTP method should this web service support in order to allow clients to create new questions at a particular location (e.g. at <http://interview-questions.com/question/1>)?


Select one:

- ☐ a. PUT
- ☒ b. POST
- ☐ c. GET
- ☐ d. PATCH

**Question 26**

Not yet answered

Marked out of 1.00

 Flag question**Which of the following HTTP methods are considered 'safe' AND 'idempotent'?**


Select one or more:

- ☒ a. GET
- ☒ b. HEAD
- ☐ c. POST
- ☐ d. PUT

Question 27

Not yet answered

Marked out of 1.00

 Flag question

Which type of join is used in following SQL:

```
SELECT PRODUCT.PRODUCT_ID,  
       PRODUCT.NAME,  
       INVOICE.ORDER_ID,  
       INVOICE.TOTAL  
FROM PRODUCT,  
       INVOICE;
```


Select one:

- ☐ a. Self Join
- ☐ b. Inner Join
- ☐ c. Outer Join
- ☒ d. Cartesian Join

**Question 28**

Not yet answered

Marked out of 1.00

 Flag question

Which of the following queries are not correct SQL statements?


Select one or more:

- ☒ a. Select product_id, product_price, product_name LIKE 'a%' from products;
- ☒ b. Select emp_id,sal,emp_name from employee where sal >= 2000;
- ☒ c. Select emp_id, sum(bonus) from employee having sum(bonus) > 2000;
- ☐ d. All are correct

Question 29

Not yet answered

Marked out of 1.00

 Flag question

The SQL statement

```
SELECT SUBSTR('123456789', INSTR('abcabcabc', 'b' ), 4) FROM DUAL ;  
prints
```


Select one:

- ☐ a. 6789
- ☒ b. 2345
- ☐ c. 1234
- ☐ d. 456789

Question 30

Not yet answered

Marked out of 1.00

 Flag question

The SQL statement

```
SELECT SYSDATA FROM DUAL ;
```

prints 06-FEB-05;

Consider the three SQL statements

```
SELECT TO_DATE( (LTRIM (RTRIM('NOV 23, 2005'))), 'Mon DD, YY') FROM DUAL; -- Statement 1
```

```
SELECT TO DATE( (RTRIM (LTRIM(' NOV 23, 2005 '))), 'Mon DD, YY' FROM DUAL; -- Statement 2
```

```
SELECT TO DATE( 'NOV 23, 2005', 'Mon DD, YY') FROM DUAL; -- Statement 3
```

Which of these statements gives the same output?

Select one:

☐ a. Only Statement 1 and Statement 2

☐ b. Only Statement 1 and Statement 3


☐ c. Only Statement 2 and Statement 3

☒ d. All the three statements give the same output

**Question 31**

Not yet answered

Marked out of 1.00

 Flag question

You have a very large data set to **import into you Cassandra database.**

Which of the following tools is the best for this scenario?

Select one:

☒ a. Copy

☐ b. Cqlsh


☐ c. Sstableloader

☐ d. Insert

Question 32

Not yet answered

Marked out of 1.00

 Flag question

Which of the following are types of NoSQL databases?

Select one or more:

☒ a. Key value store

☐ b. Tree store

☐ c. Structural store


☐ d. Hierarchical store

☒ e. Document store

Question 33

Not yet answered

Marked out of 1.00

 Flag question

While designing a NoSQL schema, when should we consider embedding documents, instead of adding references to them?

Select one or more:

☒ a. When we have a 'contains' relationship between entities.

☐ b. When the number of embedded documents can be unlimited.

☒ c. When the number of embedded documents is limited and known.


☐ d. When we have a one-to-many relationship.



Question 34

Not yet answered

Marked out of 1.00

 Flag question

Which of the following statements are **correct** about the CommitLog component in Cassandra?

Select all that apply:


Select one or more:

- ☐ a. Every read operation is written in a log file
- ☒ b. Every write operation is written in a log file
- ☐ c. Allows you to manage the compression strategy
- ☐ d. It contains debug information about Cassandra, such as access requests
- ☒ e. It's used by Cassandra for recovery in case of crash.

Question 35

Not yet answered

Marked out of 1.00

 Flag question

Which one of the following is the correct use case for choosing "custom objects" for data communication.


Select one:

- ☐ a. You need to support different types of callers, including third-party clients.
- ☐ b. You need loose coupling, where the caller must know about only the data that defines the business entity and the schema that provides metadata for the business entity.
- ☐ c. You are communicating with components that know about the object type.
- ☐ d. You need built-in support for serialization.

Question 36

Answer saved

Marked out of 1.00

 Flag question

You are working on a new user management system, which is primarily used to track the individual user accounts for 3rd party vendor access to the system. When a new vendor is added to the system, or an old vendor is off-boarded from the system, their entire user roster (100+ users) are added to or removed from the system. This system will use a REST endpoint to provide basic CRUD access to the user table. Your goal is to create a highly performant system. What is the first thing you should focus your energy on?


Select one:

- ☒ a. Database table/index representations of the user object
- ☐ b. Caching and invalidation logic
- ☐ c. API design
- ☐ d. Documentation
- ☐ e. Real time performance monitors

Question 37

Answer saved

Marked out of 1.00

 Flag question

Which of the following are situations suitable for the use of EDA instead of SOA?


Select one or more:

- ☐ a. Vertical interaction between the layers of functional breakdown
- ☒ b. Horizontal communication between tiers in a process chain
- ☒ c. Functional request reply communication; the requester waits for a response
- ☒ d. Processes that cross recognizable functional organization borders
- ☐ e. Transactional processes that require commit and roll back

Question 38

Answer saved


Marked out of 1.00

 Flag question

Which technologies are mandatory to implement a Service Oriented Architecture?

Select one:


- ☐ J2EE
- ☐ SSL over TCP/IP
- ☐ Relational Databases (SQL)
- ☒ Oauth

 None of the above

Question 39

Not yet answered


Marked out of 1.00

 Flag question

Which one of the following is not a design pattern used in communication.

Select one:


- ☐ a. Active Object
- ☐ b. Entity Translator
- ☐ c. Active Record

 d. Reliable Sessions

**Question 40**



Answer saved

Marked out of 1.00

 Flag question

What of the following can be considered drawbacks of using a microservice architecture against ordinary monolithic style?


Select one or more:

- ☐ Code duplication
- ☐ Highly coupled services
-  ☒ Change cycles are tied together
-  ☒ Expensive communication channels
- ☐ Hard to scale

**Question 41**




Not yet answered

Marked out of 1.00

 Flag question

A microservice architecture is good for:


Select one or more:

- ☐ Unified releases - Easy to ship multiple components with shared dependencies
-  ☒ Technology diversity - using the right tools for the right job/service
-  ☒ Agility - Faster time from code change to release
-  ☒ Strong componentization - Well defined boundaries between teams
- ☐ Latency Performance - Calls to other components are as fast as possible

Question 42

Not yet answered

Marked out of 1.00

 Flag question

What of the following are considered benefits of using a Microservice architecture?


Select one or more:

- ☒ Fault-tolerant design.
- ☐ Easier to trace problems
- ☐ Easier to manage as the project size increases
- ☒ Easy to scale

Question 43

Not yet answered

Marked out of 1.00

 Flag question

You need to implement HTTP session management without using server-side storage of any kind, so you opted to use JSON Web Tokens. All goes smoothly and the required scalability is achieved, but a new problem appears. Which one?


Select one:

- ☒ a. CPU load has increased too much on each request
- ☐ b. It is impossible to log out all users at once
- ☐ c. It is impossible to log out a specific user

**Question 44**

Not yet answered

Marked out of 1.00

 Flag question

You're just been assigned to take a prototype data warehousing solution and think about what parts need to be expanded to be ready for a production deployment. The basic structure of the system is a single endpoint that takes a large (Several GB) zipped data file at regular intervals from several clients. This file is then unzipped, and the various data logs are pushed into columnar databases for post-processing analysis. The primary concern from the team's current Architect is that they have not formulated an authentication solution yet for the endpoint. Which of the following would be the best authentication solution that balances performance and protection against common attack variants:


Select one:

- ☐ A client's credentials are saved in a metadata JSON file in the ZIP package
- ☐ A new endpoint is created to authenticate and get a token (ex: JWT). That token is passed to the submission endpoint in the HTTP header
- ☐ A new endpoint is created to authenticate and get a token (ex: JWT). That token is passed to the submission endpoint in the HTTP body
- ☐ A new endpoint is created to authenticate and get a token (ex: JWT). That token is passed to the submission endpoint via the name of the zipped
- ☐ The package is saved in AWS/S3, and the submission endpoint is updated to take a link to this content
- ☒ There is not enough information here to provide a reasonable suggestion on an authentication/authorization scheme

**Question 45**

Not yet answered

Marked out of 1.00

 Flag question

What other techniques and methodologies are use in conjunction with CI?

Select one or more:


- ☐ a. Integration Driven Development
- ☒ b. Application Profiling
- ☒ c. Static Code Analysis as quality gates
- ☒ d. Automated Unit Tests



Question 46

Not yet answered

Marked out of 1.00

 Flag question

In order to implement Continuous Delivery, you must met the following conditions:


Select one or more:

- ☒ a. The development team must prioritize to keep the software deployable while working on new features
- ☒ b. You have fast, automated feedback about the production readiness
- ☐ c. You are able to do push-button deployments of the software to Production environment
- ☐ d. You must have a dedicated QA team working full time in the project

Question 47

Not yet answered

Marked out of 1.00

 Flag question

A new employee has just started working at your company. It is your job to give them administrator access to your AWS console. You have given them a user name, access key ID, secret access key, and you have generated their password. They are now able to log in to your AWS console, but they are not able to interact with any AWS services. What should you do next?


Select one:

- ☒ a. Require multi-factor authentication for their user account.
- ☐ b. Ensure that they are logging in to your AWS console from your corporate network and not the normal internet.
- ☐ c. Tell them to log out and log back in again.
- ☐ d. Grant them administrator access by adding them to the administrator group

Question 48

Not yet answered

Marked out of 1.00

 Flag question

A user has enabled versioning on an S3 bucket. The user is using server side encryption for data at Rest. If the user is supplying his own keys for encryption (SSE-C), which of the below mentioned statements is true?


Select one:

- ☐ a. The user should use the same encryption key for all versions of the same object
- ☒ b. It is possible to have different encryption keys for different versions of the same object
- ☐ c. AWS S3 does not allow the user to upload his own keys for server side encryption
- ☐ d. The SSE-C does not work when versioning is enabled

Question 49

Not yet answered

Marked out of 1.00

 Flag question

Which one of the following technologies and services is usually used to implement Event Oriented Architectures?

Select one:


- ☒ AWS Services SQS and SNS
- ☐ MongoDB
- ☐ Apache Spark
- ☐ AWS S3
- ☐ AWS Cloudwatch



Question 50

Not yet answered

Marked out of 1.00

 Flag question

Which of the following is/are correct about Scheduling containers?

- a) They must be used together with Orchestration containers.
- b) They can handle failures by doing automatic fail-overs.
- c) Host selection is one of the most important responsibilities of container schedulers.
- d) Docker Swarm, Apache Mesos, Kubernetes and Fleet have popular scheduler implementations.


Select one:

- ☐ a, b & c are true. d is false.
- ☐ b & d are true. a & c are false.
- ☒ b, c & d are true. a is false.
- ☐ a, b, c & d are true

**Question 51**

Answer saved

Marked out of 1.00

 Flag question

How Docker helps DevOps?


Select one or more:

- ☐ a. Both infrastructure and the application can be included in the container image
- ☒ b. Simplify non-functional requirements like security and performance, so DevOps can keep focused in more important tasks
- ☒ c. Eliminates the need of tools for continuous integration/deployment (like Jenkins)
- ☒ d. Allows the deploy on a wide variety of platforms securely

Question 52

Answer saved

Marked out of 1.00

 Flag question

Which of the following are true about Git Flow?


Select one or more:

- ☒ a. Has two main branches – development & master
- ☐ b. Feature branches are always merged to master branch
- ☒ c. Hotfix branches are used to create emergency fixes
- ☒ d. Release branch is created off of master branch

Question 53

Answer saved

Marked out of 1.00

 Flag question

You have changes in your working directory that you are not ready to commit, and you need to temporarily switch to another branch. Which Git command could you use to store your changes (without committing them) and come back to them later.


Select one:

- ☒ a. git stash / git stash apply
- ☐ b. git cherry-pick
- ☐ c. git reset HEAD --hard
- ☐ d. There is no such command. You must manually save your changes somewhere on the filesystem.

Question 54

Answer saved

Marked out of 1.00

 Flag question

Which of the below statements are true for Git Clone?


Select one or more:

- ☐ Git will get working copy from the server.
- ☒ It is equivalent to Checkout command of other VCS systems (e.g. SVN, CVS).
- ☒ Git will get a full copy of the data that the server has.
- ☒ It clones the repository to a newly created directory.

**Question 55**

Answer saved

Marked out of 1.00

 Flag question

John clones an open source project in Github. He wants to contribute to the project with some minor changes. Arrange the tasks below in the correct order to allow John to have his changes accepted on the open source project:

1. Open a Pull Request
2. Make commit with his changes
3. Push branch to Github Project
4. Create a branch from master
5. Project owner merges Pull Request


Select one:

- ☐ a. 14325
- ☐ b. 32145
- ☐ c. 42135
- ☒ d. 42315

**Question 56**

Not yet answered

Marked out of 1.00

 Flag question

Which of the following is incorrect about Incremental model of software development?


Select one:

- ☐ It is used when there is a risk to develop whole system at once
- ☐ It allows customer to see critical functionality of application at early stage of development
- ☒ Total cost of the development is less as work is done in parts
- ☐ Incremental model requires a well prepared planning schedule to divide project activities

Question 57

Not yet answered

Marked out of 1.00

 Flag question

As per Agile, project progress is monitored in Scrum on basis?


Select one:

- ☐ Monthly
- ☐ Fortnightly
- ☐ Weekly
- ☒ Daily

Question 58

Not yet answered

Marked out of 1.00

 Flag question

In Agile methodology, which of the following is/are considered as principles of Scrum?


Select one:

- ☐ Cross Functional Teams
- ☐ Quarterly Performance Review
- ☒ Time Boxes
- ☐ A and B
- ☐ A and C

**Question 59**

Not yet answered

Marked out of 1.00

 Flag question

In a development project with working processes, a Product Owner wants to improve without interfering an existing system. Which of the following approach is best suitable?

Select one:

- ☐ Agile
- ☐ Scrum
- ☐ Kanban
- ☒ None of the above



Two strings, a and b, are said to be twins only if they can be made equivalent by performing some number of operations on one or both strings. There are two possible operations:

SwapEven: Swap a character at an even-numbered index with a character at another even-numbered index.

SwapOdd: Swap a character at an odd-numbered index with a character at another odd-numbered index.

For example, a = "abcd" and b = "cdab" are twins because we can make them equivalent by performing operations. Alternatively, a = "abcd" and b = "bcda" are not twins (operations do not move characters between odd and even indices), and neither are a = "abc" and b = "ab" (no amount of operations will insert a c into string b).

Complete the code in the editor below, the twins() method with the following params.

An array of n strings named a . An array of n strings named b . The function must return an array of strings where each index i ($0 \leq i < n$) contains the string Yes if a_i and b_i are twins or the string No if they are not.

Input Format:

The internal test cases will pass the following input to the program using the STDIN and expect output on the STDOUT:

The first line contains an integer, n , denoting the number of elements in a .

Each line i of the n subsequent lines (where $0 \leq i < n$) contains a string describing a_i .

The next line contains an integer, n , denoting the number of elements in b .

Each line i of the n subsequent lines (where $0 \leq i < n$) contains a string describing b_i .

Constraints:

$1 \leq n \leq 103$

$1 \leq \text{length}(a_i), \text{length}(b_i) \leq 100$

a_i and b_i are not guaranteed to have the same length.

Strings a_i and b_i contain lowercase letters only (i.e., a through z).

```
import java.io.*;
```

```
import java.util.*;
```

```
import java.text.*;
```

```
import java.math.*;
```

```
import java.util.regex.*;
```

```
public class Tester {
```

```
    /**
```

```
        * Complete the function below.
```

```
        * DO NOT MODIFY anything outside this method.
```

```
    */
```

```
    static boolean[] twins(String[] a, String[] b) {
```

```

        boolean[] result = new boolean[a.length];

        return result;
    }

    /**
     * DO NOT MODIFY THIS METHOD!
     */

    public static void main(String[] args) throws IOException {

        Scanner in = new Scanner(System.in);

        int n = Integer.parseInt(in.nextLine().trim());

        String[] a = new String[n];

        for(int i = 0; i < n; i++) {

            a[i] = in.nextLine();

        }

        int m = Integer.parseInt(in.nextLine().trim());

        String[] b = new String[m];

        for(int i = 0; i < m; i++) {

            b[i] = in.nextLine();

        }

        // call twins function

        boolean[] results = twins(a, b);

        for(int i = 0; i < results.length; i++) {

            System.out.println(results[i]? "Yes" : "No");

        }

    }

}

```