Q7. What are different ways to create String Object?

String str1=”abc”;

String str2=new String(“abc”);

Q8. How can we make String upper case to lower case?

String str1=”ABC”;

System.out.println(str1.tolowercase());

Q9. How can we make String Lower case to Upper case?

String str1=”abc”;

System.out.println(str1.touppercase());

Q10. What is String subsequence method?

Susequence is a build in function. It returns the new character sequence that is a subsequence of this sequence.

Q11. How to Split String in java?

Java String Split method is used for splitting into its substrings based on the given regular expression.

For example:

String =”Object-oriented-programming-language”

Regular Expression here is: –

The Output will be

Object

Oriented

programming

language

Q35. Write test cases for how to test just the withdrawing functionality from ATM ( Minimum 10 test cases required )

Check the card number and pin number.

Verify that it allows one withdrawal transaction per request.

Verify the error message by inserting the wrong card.

Verify the error message by entering the wrong pin.

Verify the error message by inserting the card wrong way.

Verify that it blocks the transaction if the no of incorrect Pin entered.

Verify that it prints the receipt correctly.

Verify that it will show message when the amount is less than the withdrawal amount.

Verify that it ask the PIN to enter after insertion of cad correctly.

Verify that it logs out after each transaction.

Q36. Write to test scenarios to test Pencil

Verify that the user can write smoothly.

Verify that we can able to read the text written by the pencil.

Verify the strength of the lead.

Check that it can be erasable.

Check the color of the text.

Verify the length and weight as per requirement.

Q37.What is JVM and explain me the Java memory allocation

JVM-Java Virtual Machine. It is an execution environment converts the java bytecode into a machine code.

Q38. What is Polymorphism and encapsulation?

PolyMorphism:

Poly-many Morphism-forms.

Any method which is accepting parent class can take its child class.

Any Child object can replace a roll of itself and parent.

Two types:

1.Static Polymorphism

2.Dynamic Polymorphism

Encapsulation:

Binding objects state and behavior.

It is used to hide the implementation.

Q39. What is method overloading and Method over riding?

Overloading:

A class will allows to have more than one method with same name but different argument list.

Overriding:

A class will allows to have more than one method with same name and same argument list.

Q40. Why string is Immutable?

String is Immutable because you cannot change the values.Once string object is created its value cannot be changed but a new string object is created.

Q41. What is the difference between String and String buffer?

String:

String is Immutable .It is thread safe so Deadlock will not arise. It is Slow because of thread safe.

StringBuffer:

String Buffer is mutable because when you modify any string the existing string will get modify. It is thread safe so deadlock will not arise. It is slow but faster than a string.

Q42. What is the difference between array and array list?

Array:

Arrays are fixed in size. Arrays can hold only homogeneous datatypes.

No underlying datastructure for array. No readymade method.Arrays can hold both object and primitive. It uses for loop to iterate an array.

ArrayList:

ArrayList can increase or decrease in size. It can hold both homogeneous and heterogeneous elements. Readymade methods are available. It can hold only object type but primitive. Use iterator to iterate an arraylist.

Q43. What is the difference between hash map and Hash table?

HashMap:

It is un-ordered and it is not thread safe. It allows one null key but multiple null values. It is fast.Implementation is not synchronized.

HashTable:

It is ordered and it is thread safe. It doesn’t allow any null values and key. It is slow. Implementation is synchronized.

Q44. What is a vector in Java?

The Vector class implements a growable array of objects.Similar to an array,it contains components that can be accessed using an integer index. The size of an vector can grow or shrink as needed to accomadate adding and removing items.

Q45. What is set in java?

Set is an interface which is an unordered collection of objects in which duplicate values cannot be stored. It is implemented by

1.HashSet

2.LinkedHashSet

3.TreeSet

Q46. What is an abstract class?

A class that is declared using “abstract” keyword is an abstract class. It can have

Abstract method-method without body

Concrete method-method with body

An abstract class cannot be instantiated ie you cannot create an object.

Q47. What is an interface?

An interface is a collection of abstract method. A class implements an interface,so it is inheriting the abstract method of the interfaces.

Q48. Why Java is Platform independent?

Java program can run on any operating system.when a java program is is running it sends the code to compiler which converts it into bytecodes.This bytecode is send to JVM. JVM recoganizes the platform and it converts them into machine code.

Q49. What are access modifiers? Give me an example?

Access modifier in java specifies the accessibility of a class, method or a constructor. we can change the access level of a class,method or a constructor.

There are four types:

1.private: can be accessed only with the same class.

2.Default: can be accessed within the same package.

3.Protected: can be accessed to the same packages and other package subclasses.

4.Public: can be accessed to all the classes.

Q50. What are java exceptions? Give me an example

Java exceptions is a problem that occurs during the execution. When an exception occurs the program is disturbed and terminated.so the exceptions are to be handled.

Example:

A user entered an invalid data.

A file that needs to be open cannot be found.

Q51. What is the difference between throws and throwable?

Throw:

It is used to throw an exception explicitily.

Throw keyword is used in the method body to throw exception.

When a certain error condition occurs ,throw keyword is used to return an exception.

Throws:

It is used to declare an exception like try-catch block.

It is used in the method signature to define what kind of error occur during the execution of the program.

Q52. What is the difference between Error and exception?

Error:

Errors cannot be able to handle.

It occurs at run time.

It classified as unchecked type.

Exception:

Exceptions can be handled using try-catch block.

It occurs at both run time and compile time.

It can be checked or unchecked.

Q53. What is the difference between Error, throwable and exception?

Error:

Errors cannot be able to handle.

It occurs at run time.

It classified as unchecked type.

Throwable:

It is a superclass of all the errors.

Exception:

Exceptions can be handled using try-catch block.

It occurs at both run time and compile time.

It can be checked or unchecked.

Q54. What are collection APIs, give me an example

The collection API is a set of classes and interfaces that support operation on collections of objects.

Examples:

Classes: HashMap, Hashset, ArrayList, LinkedList, TreeSet, TreeMap

Interfaces: Collection, set, map, List

Q55. What is the difference between final and finally?

Final:

Once it is declared it cannot change it.

Eg: final String pi=3.14.

Class can be final. If it is final it cannot be inherited.

A method can be final. If it is final it cannot be overridden.

Finally:

Java finally block is always executed whether exception is handled or not.

Q56. Will java supports multiple inheritance?

No ,java cannot support multiple inheritance. A class cannot extend more than one class. To overcome this, a class can implement one or more interfaces.

Q57. What are the different types of interface? (Ans List, set, Queue)

List

Set

Queue

Q58. What are wrapper class? Give me an example

Wrapper class in java are used to convert primitive data type into their corresponding objects.

Example:

Int a=10;

Integer inum=new Integer(a);

Q59. What is boxing and unboxing in Java? Explain with an example

Boxing:

Conversion of primitive datatype to the object of their corresponding wrapper class. It is also called as auto boxing.

Eg:

int to Integer

long to Long

Unboxing:

The reverse process of auto boxing is called unboxing.

Eg:

Integer to int

Character to char

Q60. Explain for each loop

In for each loop, we are not defining any variables or condition or increment /decrement. Instead declare a variable of same type followed by a colon then array name.

Syntax:

for(datatype variable name:Array)

Q61. What are iterators, explain with an example

An Iterator is an object that can be used to loop through collections.

Ex:

ArrayList

Hashset

Q 63. What is multithreading, serialization and Generics in Java

Multithreading:

Multithreading allows concurrent execution of two or more parts of a program for maximum utilization of a CPU. Each part of such program is called thread.

Serialization:

Java provides a mechanism, called object serialization where an object can be represented as a sequence of bytes that includes the objects data as well as information about the objects type and the types of data stored in the object.

Generics:

Generics means parameterized types. The idea is to allow type to be a parameter to method, classes and interfaces. Using generics, it is possible to creat classes that works with different data types.