331. Which of the following are true about the Error and Exception classes?  
a) Both classes extend Throwable.  
b) The Error class is final and the Exception class is not.  
c) The Exception class is final and the Error is not.  
d) Both classes implement Throwable.

Ans : a.

332. Which of the following are true?  
a) The Void class extends the Class class.  
b) The Float class extends the Double class.  
c) The System class extends the Runtime class.  
d) The Integer class extends the Number class.

Ans : d.

333. Which of the following will output -4.0  
a) System.out.println(Math.floor(-4.7));  
b) System.out.println(Math.round(-4.7));  
c) System.out.println(Math.ceil(-4.7));  
d) System.out.println(Math.Min(-4.7));

Ans : c.

334. Which of the following are valid statements.  
a) public class MyCalc extends Math  
b) Math.max(s);  
c) Math.round(9.99,1);  
d) Math.mod(4,10);  
e) None of the above.

Ans : e.

335. What is meant by Stream and what are the types of Streams and classes of the Streams?

Ans : A Stream is an abstraction that either produces or consumes information.  
  
There are two types of Streams. They are:  
**Byte Streams** : Byte Streams provide a convenient means for handling input and output of bytes.  
**Character Streams** : Character Streams provide a convenient means for handling input and output of characters.  
**Byte Stream classes** : Byte Streams are defined by using two abstract classes. They are:InputStream and OutputStream.  
**Character Stream classes** : Character Streams are defined by using two abstract classes. They are : Reader and Writer.

336. Which of the following statements are true?  
a) UTF characters are all 8-bits.  
b) UTF characters are all 16-bits.  
c) UTF characters are all 24-bits.  
d) Unicode characters are all 16-bits.  
e) Bytecode characters are all 16-bits.

Ans : d.

337. Which of the following statements are true?  
a) When you construct an instance of File, if you do not use the filenaming semantics of the local machine, the constructor will throw an IOException.  
b) When you construct an instance of File, if the corresponding file does not exist on the local file system, one will be created.  
c) When an instance of File is garbage collected, the corresponding file on the local file system is deleted.  
None of the above.

Ans : a,b and c.

338. The File class contains a method that changes the current working directory.  
True/False

Ans : False.

339. It is possible to use the File class to list the contents of the current working directory.  
True/False

Ans : a.

340. Readers have methods that can read and return floats and doubles.  
True/False

Ans : b.

391. The tag contains two attributes namely \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_.

Ans : Name , value.

392. Passing values to parameters is done in the \_\_\_\_\_\_\_\_\_ file of an applet.

Ans : .html.

393. What tags are mandatory when creating HTML to display an applet.  
a) name, height, width  
b) code, name  
c) codebase, height, width  
d) code, height, width

Ans : d.

394. Applet’s getParameter( ) method can be used to get parameter values.  
True. / False.

Ans : True.

395. What are the Applet’s Life Cycle methods? Explain them?

Ans :  
**init( ) method**- Can be called when an applet is first loaded.  
**start( ) method**- Can be called each time an applet is started.  
**paint( ) method**- Can be called when the applet is minimized or refreshed.  
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396. What are the Applet’s information methods?

Ans : getAppletInfo( ) method : Returns a string describing the applet, its author ,copy  
right information, etc.  
getParameterInfo( ) method : Returns an array of string describing the applet’s parameters.

397. All Applets must import java.applet and java.awt.  
True. / False.

Ans : True.

398. What are the steps involved in Applet development?

Ans :  
a) Edit a Java source file,  
b) Compile your program and  
c) Execute the appletviewer, specifying the name of your applet’s source file.

399. Applets are executed by the console based Java run-time interpreter.  
True. / False.

Ans : False.

400. Which classes and interfaces does Applet class consist?

Ans : Applet class consists of a single class, the Applet class and three interfaces: AppletContext,  
AppletStub and AudioClip.

431. What Checkbox method allows you to tell if a Checkbox is checked?

Ans : getState()

432. Which Component method is used to access a component's immediate Container?  
a) getVisible()  
b) getImmediate  
c) getParent()  
d) getContainer

Ans : c.

433. What methods are used to get and set the text label displayed by a Button object?

Ans : getLabel( ) and setLabel( )

434. What is the difference between a Choice and a List?

Ans : A Choice is displayed in a compact form that requires you to pull it down to see the list of available choices. Only one item may be selected from a Choice.  
A List may be displayed in such a way that several List items are visible. A List supports the selection of one or more List items.

435. Which Container method is used to cause a container to be laid out and redisplayed?

Ans : validate( )

436. What is the difference between a Scollbar and a Scrollpane?

Ans : A Scrollbar is a Component, but not a Container.  
A Scrollpane is a Container and handles its own events and performs its own  
scrolling.

437. Which Component subclass is used for drawing and painting?

Ans : Canvas.

438. Which of the following are direct or indirect subclasses of Component?  
a) Button  
b) Label  
c) CheckboxMenuItem  
d) Toolbar  
e) Frame

Ans : a, b and e.

439. Which of the following are direct or indirect subclasses of Container?  
a) Frame  
b) TextArea  
c) MenuBar  
d) FileDialog  
e) Applet

Ans : a,d and e.

440. Which method is used to set the text of a Label object?  
a) setText( )  
b) setLabel( )  
c) setTextLabel( )  
d) setLabelText( )

Ans : a.

351. Which of the following are true?  
a) The InputStream and OutputStream classes are byte-oriented.  
b) The ObjectInputStream and ObjectOutputStream do not support serialized object input and output.  
c) The Reader and Writer classes are character-oriented.  
d) The Reader and Writer classes are the preferred solution to serialized object output.

Ans : a and c.

352. Which of the following are true about I/O filters?  
a) Filters are supported on input, but not on output.  
b) Filters are supported by the InputStream/OutputStream class hierarchy, but not by the Reader/Writer class hierarchy.  
c) Filters read from one stream and write to another.  
d) A filter may alter data that is read from one stream and written to another.

Ans : c and d.

353. Which of the following are true?  
a) Any Unicode character is represented using 16-bits.  
b) 7-bits are needed to represent any ASCII character.  
c) UTF-8 characters are represented using only 8-bits.  
d) UTF-16 characters are represented using only 16-bits.

Ans : a and b.

354. Which of the following are true?  
a) The Serializable interface is used to identify objects that may be written to an output stream.  
b) The Externalizable interface is implemented by classes that control the way in which their objects are serialized.  
c) The Serializable interface extends the Externalizable interface.  
d) The Externalizable interface extends the Serializable interface.

Ans : a, b and d.

355. Which of the following are true about the File class?  
a) A File object can be used to change the current working directory.  
b) A File object can be used to access the files in the current directory.  
c) File objects are used to access files and directories on the local file system.  
d) File objects can be garbage collected.  
e) When a File object is garbage collected, the corresponding file or directory is deleted.

Ans : b, d and e.

356. How do you create a Reader object from an InputStream object?  
a) Use the static createReader( ) method of InputStream class.  
b) Use the static createReader( ) method of Reader class.  
c) Create an InputStreamReader object, passing the InputStream object as an argument to the InputStreamReader constructor.  
d) Create an OutputStreamReader object, passing the InputStream object as an argument to the OutputStreamReader constructor.

Ans : c.

357. Which of the following are true?  
a) Writer classes can be used to write characters to output streams using different character encodings.  
b) Writer classes can be used to write Unicode characters to output streams.  
c) Writer classes have methods that support the writing of the values of any Java primitive type to output streams.  
d) Writer classes have methods that support the writing of objects to output streams.

Ans : a and b.

358. The isFile( ) method returns a boolean value depending on whether the file object is a file or a directory.  
True / False.

Ans : True.

359. Reading or writing can be done even after closing the input/output source.  
True/False.

Ans : b.

360. The \_\_\_\_\_\_\_\_ method helps in clearing the buffer.

Ans : flush( ).

361. The System.err method is used to print error message.  
True/False.

Ans : True.

362. What is meant by StreamTokenizer?

Ans : StreamTokenizer breaks up InputStream into tokens that are delimited by sets of characters.  
It has the constructor : StreamTokenizer(Reader inStream).  
Here inStream must be some form of Reader.

363. What is Serialization and deserialization?

Ans : Serialization is the process of writing the state of an object to a byte stream.

364. Which of the following can you perform using the File class?  
a) Change the current directory  
b) Return the name of the parent directory  
c) Delete a file  
d) Find if a file contains text or binary information

Ans : b and c.

365. How can you change the current working directory using an instance of the File class called FileName?  
a) FileName.chdir("DirName").  
b) FileName.cd("DirName").  
c) FileName.cwd("DirName").  
d) The File class does not support directly changing the current directory.

Ans : d.

***EVENT HANDLING***

366. The event delegation model, introduced in release 1.1 of the JDK, is fully compatible with the event model.  
True / False

Ans : b.

367. A component subclass that has executed enableEvents( ) to enable processing of a certain kind of event cannot also use an adapter as a listener for the same kind of event.  
True / False

Ans : b.

368. What is the highest-level event class of the event-delegation model?

Ans : The java.util.eventObject class is the highest-level class in the event-delegation hierarchy.

369. What interface is extended by AWT event listeners?

Ans : All AWT event listeners extend the java.util.EventListener interface.

370. What class is the top of the AWT event hierarchy?

Ans : The java.awt.AWTEvent class is the highest-level class in the AWT event class hierarchy.

371. What event results from the clicking of a button?

Ans : The ActionEvent event is generated as the result of the clicking of a button.

372. What is the relationship between an event-listener interface and an event-adapter class?

Ans : An event-listener interface defines the methods that must be implemented by an event  
handler for a particular kind of event.  
An event adapter provides a default implementation of an event-listener interface.

373. In which package are most of the AWT events that support the event-delegation model defined?

Ans : Most of the AWT–related events of the event-delegation model are defined in the  
java.awt.event package. The AWTEvent class is defined in the java.awt package.

374. What is the advantage of the event-delegation model over the earlier event-inheritance model?

Ans : The event-delegation has two advantages over the event-inheritance model.  
They are :  
It enables event handling by objects other than the ones that generate the events. This  
allows a clean separation between a component’s design and its use.  
  
It performs much better in applications where many events are generated. This  
performance improvement is due to the fact that the event-delegation model does not  
have to repeatedly process unhandled events, as is the case of the event-inheritance  
model.

375. Which of the following are true?  
a) The event-inheritance model has replaced the event-delegation model.  
b) The event-inheritance model is more efficient than the event-delegation model.  
c) The event-delegation model uses event listeners to define the methods of event-handling classes.  
d) The event-delegation model uses the handleEvent( ) method to support event handling.

Ans : c.

376.Which of the following is the highest class in the event-delegation model?  
a) java.util.EventListener  
b) java.util.EventObject  
c) java.awt.AWTEvent  
d) java.awt.event.AWTEvent

Ans : b.

377. When two or more objects are added as listeners for the same event, which listener is first invoked to handle the event?  
a) The first object that was added as listener.  
b) The last object that was added as listener.  
c) There is no way to determine which listener will be invoked first.  
d) It is impossible to have more than one listener for a given event.

Ans : c.

378. Which of the following components generate action events?  
a) Buttons  
b) Labels  
c) Check boxes  
d) Windows

Ans : a.

379. Which of the following are true?  
a) A TextField object may generate an ActionEvent.  
b) A TextArea object may generate an ActionEvent.  
c) A Button object may generate an ActionEvent.  
d) A MenuItem object may generate an ActionEvent.

Ans : a,c and d.

380. Which of the following are true?  
a) The MouseListener interface defines methods for handling mouse clicks.  
b) The MouseMotionListener interface defines methods for handling mouse clicks.  
c) The MouseClickListener interface defines methods for handling mouse clicks.  
d) The ActionListener interface defines methods for handling the clicking of a button.

Ans : a and d.

381. Suppose that you want to have an object eh handle the TextEvent of a TextArea object t. How should you add eh as the event handler for t?  
a) t.addTextListener(eh);  
b) eh.addTextListener(t);  
c) addTextListener(eh.t);  
d) addTextListener(t,eh);

Ans : a.

382. What is the preferred way to handle an object’s events in Java 2?  
a) Override the object’s handleEvent( ) method.  
b) Add one or more event listeners to handle the events.  
c) Have the object override its processEvent( ) methods.  
d) Have the object override its dispatchEvent( ) methods.

Ans : b.

383. Which of the following are true?  
a) A component may handle its own events by adding itself as an event listener.  
b) A component may handle its own events by overriding its event-dispatching method.  
c) A component may not handle oits own events.  
d) A component may handle its own events only if it implements the handleEvent( ) method.

Ans : a and b.

***APPLETS***

384. What is an Applet? Should applets have constructors?

Ans : Applet is a dynamic and interactive program that runs inside a Web page  
displayed by a Java capable browser. We don’t have the concept of Constructors in Applets.

385. How do we read number information from my applet’s parameters, given that Applet’s getParameter() method returns a string?

Ans : Use the parseInt() method in the Integer Class, the Float(String) constructor in the  
Class Float, or the Double(String) constructor in the class Double.

386. How can I arrange for different applets on a web page to communicate with each other?

Ans : Name your applets inside the Applet tag and invoke AppletContext’s getApplet()  
method in your applet code to obtain references to the other applets on the page.

387. How do I select a URL from my Applet and send the browser to that page?  
Ans : Ask the applet for its applet context and invoke showDocument() on that context object.  
Eg. URL targetURL;

String URLString

AppletContext context = getAppletContext();

try{

targetUR L = new URL(URLString);

} catch (Malformed URLException e){

// Code for recover from the exception

}

context. showDocument (targetURL);

Can applets on different pages communicate with each other?

Ans : No. Not Directly. The applets will exchange the information at one meeting place  
either on the local file system or at remote system.

388. How do Applets differ from Applications?

Ans :  
**Appln:** Stand Alone  
**Applet:** Needs no explicit installation on local m/c.  
**Appln:** Execution starts with main() method.  
**Applet:** Execution starts with init() method.  
**Appln:** May or may not be a GUI  
**Applet:** Must run within a GUI (Using AWT)

389. How do I determine the width and height of my application?

Ans : Use the getSize() method, which the Applet class inherits from the Component  
class in the Java.awt package. The getSize() method returns the size of the applet as  
a Dimension object, from which you extract separate width, height fields.

Eg. Dimension dim = getSize ();

int appletwidth = dim.width ();

390. What is AppletStub Interface?  
Ans : The applet stub interface provides the means by which an applet and the browser communicate. Your code will not typically implement this interface.  
It is essential to have both the .java file and the .html file of an applet in the same  
directory.  
True. / False.

Ans : False.

391. The tag contains two attributes namely \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_.

Ans : Name , value.

392. Passing values to parameters is done in the \_\_\_\_\_\_\_\_\_ file of an applet.

Ans : .html.

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c) codebase, height, width  
d) code, height, width

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True. / False.

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