**Question 1**

What are up casting and down casting in java?

**Question 2**

What is the difference between a synchronized block and synchronized method?

**Question 3**

When do you use abstract class vs interface?

**Question 4**

What is an ananimous class?

**Question 5**

In java arrays are pass by value or pass by reference?

**Question 6**

What is the difference between a thread and a process?

**Question 7**

What will be the result of the below code

Class Test(){

public static void main(String k[]){

Parse(“invalid”);

}

public static void parse(String str){

try{

float f = Float.parseFloat(str);

}catch(NumberFormatException exp){

f = 0;

}finally{

System.out.println(f);

}

}

}

**Answer:** The code will not compile

**Question 8**

What exception will be thrown when the below code is executed.

Public class ThreadX{

Public static void main(String k[]){

new ThreadX().go();

}

Public void go(){

Runnable r = new Runnable(){

Public void run(){

System.out.println(“foo”);

}

};

Thread t = new Thread(r);

t.start();

t.start();

}

}

**Answer**: java.lang.IllegalThreadStateException

**Question 9**

What will be printed to the console

**public** **class** Testing {

**public** **static** **void** main(String k[]){

**int** x=12 ;

**while**(x < 10){

x--;

}

System.*out*.println(x);

}

}

**Answer**: 12

**Question 10**

Can you execute the below code

Class Testing{

public static void main(String k){

System.out.println(“ 1”);

System.exit(2);

System.out.println(“2”);

}

}

**Answer**: No

**Question 11**

What is the difference between a HashMap, Hashtable and TreeMap

**Question 12**

What will be printed on the console

**class** A{

**public** **void** test(List list){

list.get(1);

}

}

**class** B {

**public** **static** **void** main(String k[]){

A a = **new** A();

List l = **new** ArrayList();

l.add("abc");

l.add("def");

l.add("ghk");

l.add("xyz");

a.test(l);

**for** (**int** i=0; i < l.size(); i++ ){

System.*out*.println(l.get(i));

}

}

Answer: abc

def

ghk

xyz

**Question 13**

I have a properties file “xyz.properties” as follows

First Name=abcd

Last Name = xyz

Address = 1234 xxx yyy

Write a sample program to load properties from xyz.properties file.

**Answer**:

Properties p = **new** Properties();

p.load(**new** FileInputStream("xyz.properties"));

**Question 14**

Write an algorithm for bubble sort

**Answer**:

public void bubbleSort()  
{  
   int out, in;  
   for(out=nElems-1; out>1; out--) // outer loop (backward)  
   for(in=0; in<out; in++) // inner loop (forward)  
   if( a[in] > a[in+1] ) // out of order?  
   swap(in, in+1); // swap them  
} // end bubbleSort()

**Question 15**

Write an algorithm to validate a palindrome

**Answer**:

**int**[] array = {1,2,3,4,3,2,1};

**boolean** flag = **true**;

**for**(**int** k=0; k<array.length/2; k++){

**if**(array[k] == array[array.length-(k+1)]){

System.*out*.println("match");

}**else**{

System.*out*.println("no match");

flag = **false**;

}

}

**Question 16**

Explain servlet life cycle

**Question 17**

What is the difference between forward and include methods of RequestDispatcher?

**Question 18**

What is the difference between forward and sendRedirect

**Question 19**

How can you print the stack trace of an Exception out to my JSP page?

**Question 20**

Where and how do you define the session time out for a web application?