1. Define the array. How indexing of array elements is carried out. How to contact the i-th array element?

2.1. The array and index equals one written in the name of the pointer and offset

2. What are the ways to declare and initialize one-dimensional and two-dimensional arrays of primitive and reference

types. Indicate the difference between arrays of primitive and reference types.

2.1. when you initially declare a two-dimensional array, you must remember for boolean arrays and null for an array of reference type like String array elements.

3. Explain what cloning an array means, how in Java you can clone an array, what is the difference incloning arrays of primitive and reference types.

3.1. An array type has a public method clone () which overrides the clone () method of class Object. An array type inherits all methods except clone from Object class The clone method of an array type returns a duplicate copy of the same array. Also note that every Java array implements the interfaces Cloneable and java.

4. Explain what a two-dimensional array is in Java, what is a “torn array”. How to find out the quantity

rows and the number of elements in each row for a “torn” array?

4.1.The Two Dimensional Array in Java programming language is nothing but an Array of Arrays. In Java Two Dimensional Array, data stored in row and columns, and we can access the record using both the row index and column index (like an Excel File). If the data is linear, we can use the One Dimensional Array.

elements and the elements of each array are all of type int, or of type long, or all Each variable that you use in a program takes up a certain amount of memory You can visualize this array as having three rows and five columns values for each row between braces

5. Explain situations when the following exceptions may occur in java code

java.lang.ArrayIndexOutOfBoundsException and java.lang.ArrayStoreException.

5.1   to indicate that we are trying to access array element with an illegal index. This exception is thrown when the index is either negative or greater than or equal to the size of the array

5.2 is made to store the wrong type of object into an array of objects. The ArrayStoreException is a class which extends RuntimeException, which means that it is an exception thrown at the runtime.

6. Explain why, when encoding, divide the problem being solved into methods. Explain how you understand the expression:

“One method should not perform two tasks.”

6.1. two-layer backpropaga-tion network with sufficient hidden nodes has been proven to be ... the number of division of each input and output variables must be defined in advance

7. Explain how in Java parameters are passed to methods, what is the peculiarity of passing primitive values ​​to a method

type, and in what reference.

7.1. Java are always passed-by-valueIn case of primitives, the value is simply copied inside stack memory which is then passed to the callee method; in case of non-primitives, a reference in stack memory points to the actual data which resides in the heap

8. Explain how to pass an array to a method. And how to return an array from a method. Is it possible to change the size in the method

transferred array.

8.1. pass an array to a method, the method declaration should look like this double, is passed to a method, its value is copied to the new method variable public static double increase (double x) {x + = 10; // code not allowed so return x;

9. Explain what the expression ‘return value from method’ means. How can I return a value from a method. Whether there is a

difference when returning values ​​of primitive and reference types.

9.1 method returns to the code that invoked it when it u declare a method's return type in its method declaration If u try to return a value from a method that is declared void you will get a This method returns the integer that the expression width \* height evaluates to A method can also return a reference type.

10. List the algorithms for sorting values ​​that you know, provide code that implements these algorithms

10.1