**ARRAYS IN JAVA**

QUES-1) WHAT DO YOU MEAN BY AN ARRAY?

ANS) THE COLLECTION OF SIMILAR ELEMENTS.

QUES-2) HOW TO CREATE AN ARRAY?

ANS) IN THIS WE HAVE TWO PHASE :-

1. DECLARATION
2. INITIALIZATION

TO CREATE AN 1-D ARRAY:-

Int a[] = new int[5];

QUES-3) CAN WE CHANGE THE SIZE OF THE ARRAY AT RUNTIME?

ANS) NO

QUES-4) CAN YOU DECLARE AN ARRAY WITHOUT DECLARE THE SIZE OF AN ARRAY?

ANS) YES.

QUES-5) WHAT IS THE DEFAULT VALUE OF AN ARRAY?

ANS) IT DEPENDS ON THE TYPE OF ARRAY WE USE:

* BOOLEAN – TRUE/FALSE
* STRING- NULL
* INT- 0

QUES-6) WHAT IS AN 1-D ARRAY, WRITE AN EXAMPLE?

ANS) 1-D ARRAY- THE ARRAY IN WHICH THE ELEMENTS ARE ASSIGNED IN A SINGLE ROW.

FOR EG- int nums[] = new int[5];

QUES-7) WRITE AN PROGRAM OF 2-D ARRAY?

ANS)

Int nums[][] = {

{1,2,3},

{4,5,6},

{7,8,9}

};

For(int i=0; i<=2; i++){

For(int j=0; j<=2; j++){

System.out.print(nums[i][j]);

}

}

This program will display all the elements of array.

* WHEN WE PASS AN ARRAY TO A METHOD, THEN METHOD RECEIVES AN REFERENCE OF THE ARRAY.
* JAVA ARRAY ALLOCATE STATIC MEMORY

**ARRAYS-2**

QUES-1) WHAT IS THE DEFAULT VALUE OF ARRAY FOR DIFFERENT DATA TYPES?

ANS) THERE ARE DIFFERENT TYPES OF DEFAULT VALUE WE USED IN JAVA-

1. FOR INT – THE VALUE IS 0
2. FOR STRING – THE VALUE IS NULL

QUES-2) CAN WE PASS THE NEGATIVE NUMBERS IN ARRAY SIZE?

ANS) NO

QUES-3)WHERE DOES ARRAY STORED IN JVM MEMORY?

ANS) IN HEAP

QUES-4) WHAT ARE THE DISADVANTAGES OF ARRAY?

ANS) THERE ARE BASICALLY TWO DISADVANTAGES-

* WE CAN MODIFY THE SIZE OF AN ARRAY AFTER IT IS CREATED
* IT ONLY STORE SIMILAR TYPES OF ELEMENTS AT A TIME

QUES-5) WHAT IS AN ANONYMOUS ARRAY IN JAVA? GIVE EXAMPLE?

ANS) THE ARRAY WHICH HAS NO NAME, AND ONLY USED ONCE.

FOR EG-

class Calc{

    // in this example we gonna discuss about how the anonymous array works, via adding two numbers.

    public int add(int nums[]){

        int result = 0;

        for(int n:nums){

            result = result + n;

        }

        return result;

    }

}

public class Demo {

    public static void main(String[] args) {

        Calc obj = new Calc();

        int result = obj.add(new int[]{1,2,3,4});

        System.out.println(result);

    }

}

QUES-6) WHAT ARE THE DIFFERENT WAYS TO TRAVERSE AN ARRAY IN JAVA?

ANS) IN A BROAD SENSE WE HAVE TWO WAYS TO TRAVERSE ARRAY IN JAVA

* BY USING FOR LOOP
* BY USING ENHANCED FOR LOOP / FOR EACH LOOP
* public class Array {
* public static void main(String[] args) {
* // 1d array example
* int nums[] ={1,2,3,4};
* //by using for loop
* for (int i=0; i<nums.length; i++){
* System.out.println(nums[i]);
* }
* // by using enhanced for loop
* for(int n: nums){
* System.out.println(n);
* }
* //2d array example
* int num[][] = {
* {1,2,3,4},
* {5,6,7,8},
* {9,10,11,12}
* };
* //using for each loop
* for(int n[]:num){
* for(int b : n){
* System.out.println(b);
* }
* System.out.println();
* }
* //using for loop
* for(int i=0; i<=2; i++){
* for(int j=0; j<=num[i].length; j++){
* System.out.print(num[i][j]);
* }
* System.out.println();
* }
* }
* }

QUES-7) WHAT IS THE DIFFERENCE BETWEEN LENGTH() AND LENGTH, GIVE AN EXAMPLE?

ANS)

LENGTH- IT IS A PROPERTY THAT IS USED TO CALCULATE THE LENGTH, USED IN ARRAY

LENGTH ()- IT IS METHOD OF STRING CLASS.

public class Array {

    public static void main(String[] args) {

        // 1d array example

        int nums[] ={1,2,3,4};

        System.out.println(nums.length);

        String names = "Prashant";

        System.out.println(names.length());

    }

}

1)

        int arr[] = new int[]{0,1,2,3,4,5,6,7,8,9};

        int n=6;

        n=arr[arr[n]/2];

        System.out.println(arr[n]/2);

OUTPUT- 1

2)

int arr[] = new int [5];

        System.out.print(arr);

OUTPUT- GARBAGE VALUE