Array

Definition:

* An array is a container object that holds a fixed number of values of a single type.

Different types:

* Single Dimensional Array -->X axis (1 Dimensional)
* Array is a kind of data type where there is no "Keyword".
* [] -->is an Array symbol.
* We can keep Array to variables or data types.
* int [] i OR int i[]
* We can keep other class also as data type in Array. But we need to import in present class.
* Multi-Dimensional Array -->Y axis(2 Dimensional)
* Two Dimensional Array
* [][] -->1st bracket is row and second bracket is column
* In every row column size is same.
* Combination of single dimensional arrays
* Jagged Array
* In Jagged Array we specify no.of rows.
* No.of columns we won't specify/declare.
* In jagged array we are not specifying columns so single dimensional array is not created. We can in debug it will show null.
* So we need to declare columns specific
* E.g.:

int [][] i = new int [3][];

i [0] = new int[2] -->we declare in 1st row i want 2 columns.

i[1] = new int[5] -->we declare in 2and row i want 5 columns.

i[2] = new int[3] -->we declare in 3rd row i want 3 columns.

Object creation in Array:

* One way
* Datatype[] referenceName = new datatype[Size];
* Second way
* datatype[] vairableName = { values};
* Third way
* datatype [] referenceName = new datatype[] {values};

Interview questions

* Note: java is not 100% object oriented programing language. Because for primitive data types we are not creating objects/we can't create objects of primitive data types.
* Note: did you face any exceptions?
* If we declare array index more than we declare then we will face 🡪 ArrayIndexOutOfBoundsException.

Important points in Array

* If we want to use an array we need to create an object.
* They is no datatype to store multiple values in variables. For that purpose introduced Array.
* But in arrays we are storing data by using primitive data types only.
* For non-primitive data types we need to create objects.

\*Class

\*Arrays

\*Collections

* If we declare a size we can assign values as our wish. Declare specific index and assign a value.
* If we declare a value for index we can override/reassign the value for index.
* If we not declare values to index then default values will store.
* If we want to access the values by using index only we need to access.
* In java index start with "0".
* By default values to data types:

Int -->0

String -->Null

Boolean -->false











