Collections in java

Why do we need collections

1.Arrays are fixed in the size ,size of the array cannot be changed once it’s declared

**public** **class** Test1 {

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

// **TODO** Auto-generated method stub

**int** [] a=**new** **int** [10]; // if you just remove the number there will br an error

// a[1]="prasanna"; cannot be done

a[1]=15;

}

Can only add 10 elements you cannot add 11th element and if you add 5 elements then 5 elements size will waste

2.Arrays can hold only same type of the elements // see above piece of the code

3. arrays are not implemented on any general data structure that means arrays are not giving any in built method play with arrays like contains,add etc ...

To overcome all these problems we need to use collections

Difference between arrays and collections

|  |  |
| --- | --- |
| Arrays | collections |
| Wrt to memory arrays not recommended  As memory will be lost if we declare 100 size and enter only 2 | Wrt memory collections are recommended |
| Wrt performance arrays are recommended | Wrt performance collections are not recommended as addition of one element new memory will be created and old elements will be copied to newly created memory |
| Arrays can contain primitive and object data types ex : can contain int,integer | Collections can only contain object data types means integer not int |

What is collection ?

Group of individual objects represented as single entity is called collection

What is collection Framework?

To represent the collections there are several interfaces and classes are there these are called collection framework