Dt : 2/10/2023

faq:

define Object Array?

=>The Array which is declared with java.lang.Object class is known as Object-Array.

syntax:

Object o[] = new Object[size];

Advantage of Object Array:

=>Object-Array will hold DisSimiler objects,because Object-class is the PClass or SuperClass of all the classes.

Ex-program:

maccess : Course.java

```
package maccess;
public class Course extends Object
{
    public String id,name;
    public Course(String id,String name)
    {
        this.id=id;
        this.name=name;
    }
    @Override
    public String toString()
    {
        return "CourseId:"+id+"\tCourseName:"+name;
    }
```

```
}
```

maccess : DemoArray3.java(MainClass)

```
package maccess;
public class DemoArray3
{
     @SuppressWarnings("removal")
     public static void main(String[] args)
     {
        Object ob[] = new Object[3];
        ob[0] = new Integer(123);//Integer WrapperClass
Object
        ob[1] = new String("NIT-HYD");//String-Object
        ob[2] = new Course("C123","CoreJava");
                              //User defined Class Object
        System.out.println("****Array-Details****");
        for(Object k : ob)
        {
        System.out.println("Info : "+k.toString());
        }//end of loop
     }

}
```

o/p:

*******Array-Details*******

Info : 123

Info : NIT-HYD

Info : CourseId:C123 CourseName:CoreJava

==========

****imp***

2.Multi Dimensional Arrays:

=>The Arrays which are declared with multiple dimensions are known as Multi-Dimensional Arrays.

Ex:

2-D Arrays

3-D Arrays

4-D Arrays

...

---

syntax to represent 2-D Arrays:

Class_name arr_var[][] = new Class_name[rows][cols];

==========

Ex-program:

wap to read and display 3X3 Matrix?

maccess : DemoArray4.java(MainClass)

```
package maccess;
import java.util.*;
public class DemoArray4
{
    @SuppressWarnings("removal")
    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
        try(s;){
         try {
            Integer A[][] = new Integer[3][3];
```

```
                System.out.println("---Enter 3X3 Matrix---
");
                for(int i=0;i<3;i++)
                {
                     for(int j=0;j<3;j++)
                     {
                          A[i][j] = new
~~Integer~~(s.nextInt());
                     }//InnerLoop
                }//OuterLoop
                System.out.println("***Display 3X3
Matrix***");
                for(int i=0;i<3;i++)
                {
                     for(int j=0;j<3;j++)
                     {
                          System.out.print(A[i][j]+" ");
                     }//InnerLoop
                     System.out.println();
                }//OuterLoop
           }catch(Exception e) {e.printStackTrace();}
          }//end of try with resource
     }

}
```

o/p:

---Enter 3X3 Matrix---

12

14

29

23

31

35

78

61

21

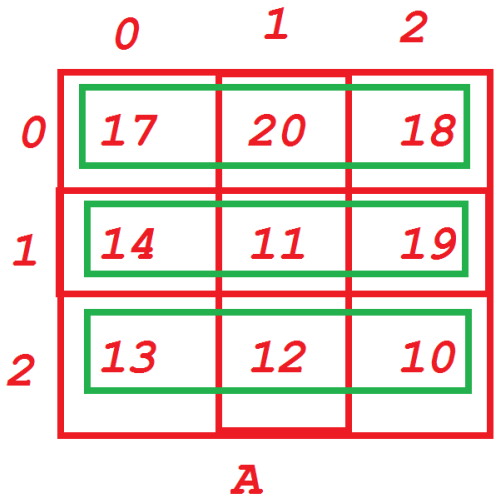
*****Display 3X3 Matrix*****

12 14 29

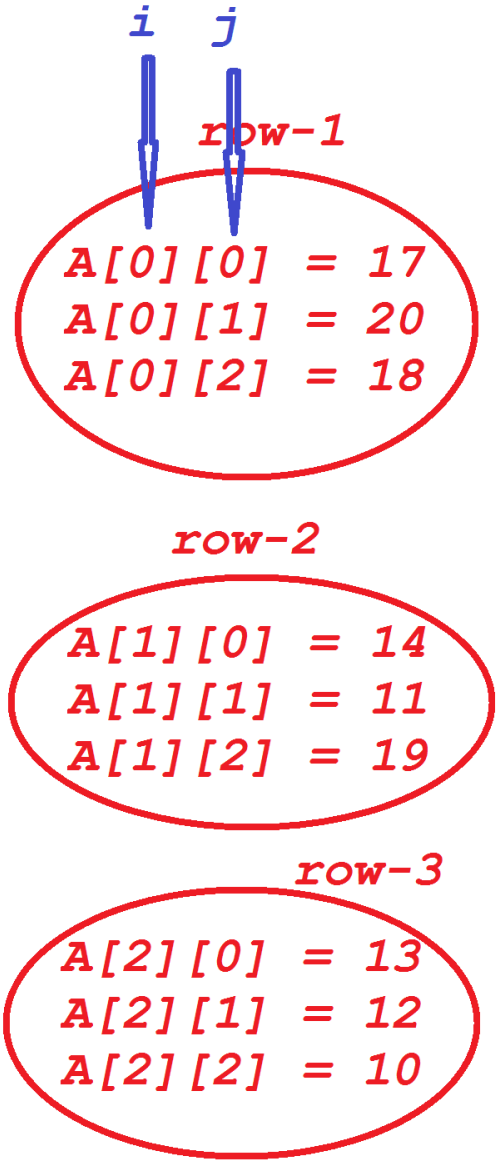
23 31 35

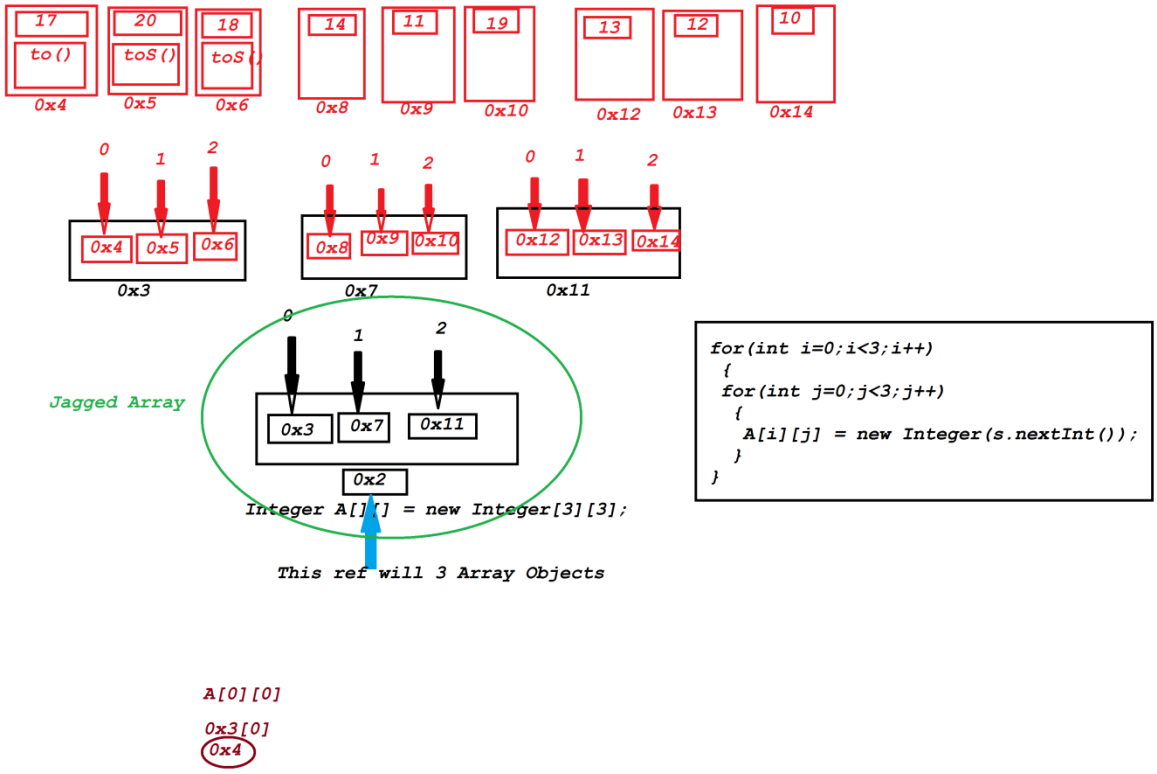
78 61 21

Diagram:


0
1
2
0
17
20
18
1
14
11
19
2
13
12
10
A

3X3 Matrix


i
j
row-1
A[0][0] = 17
A[0][1] = 20
A[0][2] = 18
row-2
A[1][0] = 14
A[1][1] = 11
A[1][2] = 19
row-3
A[2][0] = 13
A[2][1] = 12
A[2][2] = 10



==========

Summary of Arrays:

(i)Array holding User defined Class Objects

(ii)Array holding WrapperClass Objects

(iii)Array holding String-Objects

(iv)Array holding DisSimiler Objects(Object-Array)

(v)Array holding Array-Objects(Jagged Array)

==========

****imp***

Command Line Argument Program:

=>The process of passing arguments to standard main() method is known as Command Line Argument Program.

=>we pass arguments to standard main() method which execution command as follows:

java Class_name arg1 arg2 arg3 ...

Program : DemoCon.java

```
package maccess;
public class DemoCon {
     public static void main(String[] ob)
     {
          System.out.println("****dsiplay from
args[]****");
          for(String k : ob)
          {
               System.out.println(k.toString());
          }
     }
}
```

D:\Demo148>java DemoCon NIT-HYD CoreJava 12.34 A 123

*****dsiplay from args[]*****

NIT-HYD

CoreJava

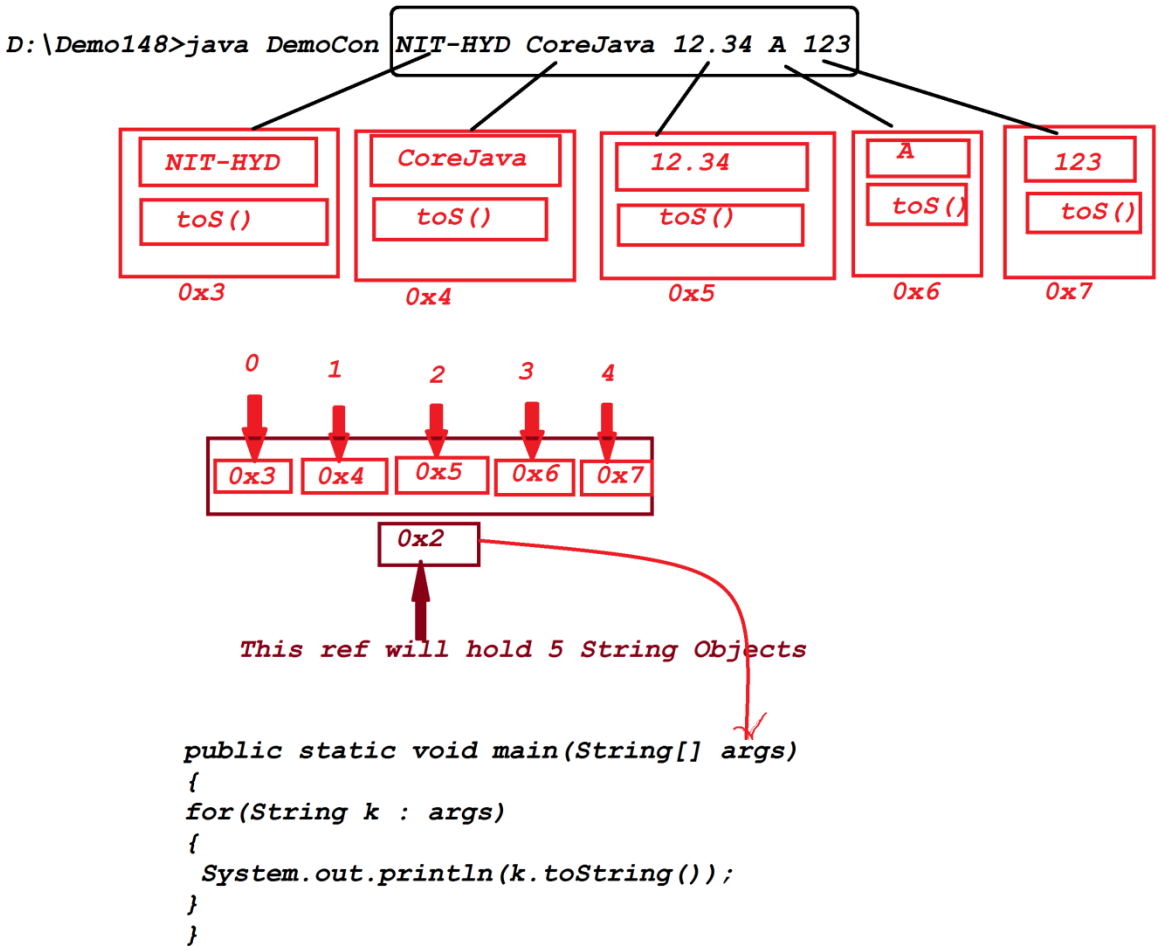
12.34

A

123

D:\Demo148>

Diagram:




```
public static void main(String[] args)
{
for(String k : args)
{
 System.out.println(k.toString());
}
}
```

==========