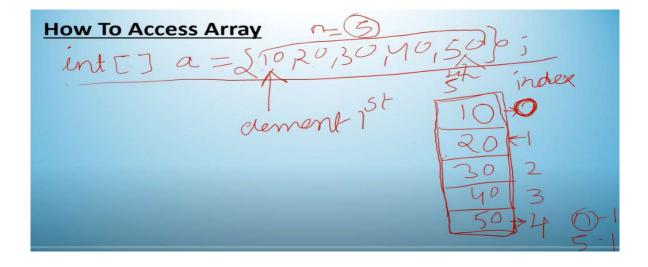
04/03/2023, 10:17 OneNote

Session-5 Single Dimensional Arrays

Thursday, July 7, 2022 4:16 PM

Arrays Arrays are used to store multiple values in a single variable, instead of declaring separate variables for each value. Java array is an object which contains elements of a similar data type. For example: If we want to store salary of 5 employees. **Using arrays** Without using Array int[] salaryEmp = {5000,6000,8000,9000,4000}; → int SalEmp1 = 5000; int SalEmp2 = 6000; int SalEmp3 = 8000; 1ST Advantage int SalEmp4 = 9000; Code Optimization: It makes the int SalEmp5 = 4000; optimized, we can retrieve or sort the data efficiently.



Single Dimensional Array

- Declare & instantiate array
- Insert values to array
- > Find length of array
- Read values from array
- Change value of an array element

04/03/2023, 10:17 OneNote

```
3 public class Arrays {
                                                                                                               ⊞ session5

√ O<sub>▶</sub> Arrays

 5-
         public static void main(String[] args) {
                                                                                                                 a main(String[]): void
             // TODO Auto-generated method stub
 7
 8
              //declare and instantiate
 9 //
              int [] roll = new int[5];
10 //
11 //
              //insert value in array
12 //
              roll[0] = 12;//1st element
13 //
              roll[1] = 22;//2nd element
14 //
              roll[2] = 32;//3rd element
15 //
              roll[3] = 45;//4th element
16 //
              roll[4] = 25;//5th element
17
18
              int [] roll = {12,22,32,45,25}
19
              //print size of an array
20
              System.out.println("size of array:" + roll.length);
21
                                                                                                         = × % | % A P P P P P - - -

■ Javadoc 
■ Declaration 
■ Console ×
terminated > Arrays [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (Nov 3, 2021, 12:52:43 PM - 12:52:44 PM)
alue of 4th element :45
2
15 //
14 //
15 //
             roll[1] = 22;//2nd element
roll[2] = 32;//3rd element
                                                                                                      ⊕ session5

√ O<sub>▶</sub> Arrays
             roll[3] = 45;//4th element
                                                                                                        • * main(String[]) : void
             roll[4] = 25;//5th element
16 //
18
19
             int [] roll = {12,22,32,45,25};
20
21
22
23
24
25
26
27
28
              //print size of an array
             System.out.println("size of array:" + roll.length);
              //read values from array
             System.out.println("value of 4th element :" + roll[3]);
             //read all the values of roll array
             for(int i=0; i<roll.length;i++ )
29
30
31
                  //code to executed
                  System.out.println(roll[i]);//12,22,32,45,25
                                                                                            □ □ Be Outline × □ 🖟 💘 💘 • 💥 🖁 □ □

② *Arrays.java

             for(int i=0; i<roll.length;i++ )
                                                                                                    ⊞ session5
29 //

→ G. Arrays

30 //
31 //
32 //
33
                                                                                                     main(String[]): void
                  //code to executed
                 System.out.println(roll[i]);//12,22,32,45,25
 35
36
37
             //for each loop - enhanced loop
           [ for(int i:roll)
```