

## 23BAI1117 – BCSE103E – Java

06/08/2024 – Day6

<https://github.com/sriram-s-23BAI1117/javap>

1)

```
ArrayEx3.java > ...
1  public class ArrayEx3{
    Run | Debug
2      public static void main(String[] args) {
3          Student[] myStudents = new Student[]{new Student(name:"Dharma"),new Student(name:"Sanvi"),
4              new Student(name:"Rupa"),new Student(name:"Ajay")};
5          for (Student m:myStudents){
6              System.out.println(m);
7          }
8      }
9  }
10
11  class Student{
12      public String name;
13      Student(String name){
14          this.name = name;
15      }
16      public String toString(){
17          return name;
18      }
19  }
```

```
PS E:\Day7-06-8-24> & 'C:\Program Files\J
' '-cp' 'C:\Users\student.PROGRAMMING404\A
2d7306\bin' 'ArrayEx3'
Dharma
Sanvi
Rupa
Ajay
```

2)

```
J ArrayEx5.java > ...
1  public class ArrayEx5 {
    Run | Debug
2      public static void main(String[] args) {
3          int[] arr = new int[4];
4          arr[0] = 10;
5          arr[1] = 20;
6          arr[2] = 30;
7          arr[3] = 40;
8          System.out.println(x:"Trying to access element outside the size of array");
9          System.out.println(arr[5]);
10     }
11 }
```

```
PS E:\Day7-06-8-24> & 'C:\Program Files\Java\jdk1.8.0_202\bin\java.exe
age\1c2cd7110de17a7fb03b991bceed5ffc\redhat.java\jdt_ws\Day7-06-8-24_82
Trying to access element outside the size of array
Exception in thread "main" java.lang.ArrayIndexOutOfBoundsException: 5
at ArrayEx5.main(ArrayEx5.java:9)
```

3)

```
J ArrayEx6.java > ...
1  public class ArrayEx6 {
    Run | Debug
2      public static void main(String[] args) {
3          int[][] arr = new int[10][20];
4          arr[0][0] = 1;
5          System.out.println("arr[0][0] = " + arr[0][0]);
6      }
7  }
```

```
PS E:\Day7-06-8-24> & 'C:\Program File
age\1c2cd7110de17a7fb03b991bceed5ffc\re
arr[0][0] = 1
```

4)

```
J ArrayEx7.java > ...
1  public class ArrayEx7 {
    Run | Debug
2      public static void main(String[] args) {
3          int[][][] arr = new int[10][20][30];
4          arr[0][0][0] = 1;
5          System.out.println("arr[0][0][0] = " + arr[0][0][0]);
6      }
7  }
```

```
PS E:\Day7-06-8-24> & 'C:\Program Files\Java\jdk-11.0.2\bin' 'ArrayEx7'
arr[0][0][0] = 1
```

5)

```
J ArrayEx8.java > ...
1  public class ArrayEx8 {
    Run | Debug
2      public static void main(String[] args) {
3          int arr[] = { 3, 1, 2, 5, 4 };
4          sum(arr);
5      }
6
7      public static void sum(int[] arr) {
8          int sum = 0;
9          for (int i = 0; i < arr.length; i++) {
10             sum += arr[i];
11         }
12         System.out.println("Sum of array values: " + sum);
13     }
14 }
```

```
PS E:\Day7-06-8-24> & 'C:\Program Files\Java\jdk-11.0.2\bin' 'ArrayEx8'
Sum of array values: 15
```

6)

```
J ArrayEx9.java > ...
1  public class ArrayEx9 {
    Run | Debug
2      public static void main(String[] args) {
3          int[] arr = m1();
4          for (int i = 0; i < arr.length; i++) {
5              System.out.print(arr[i] + " ");
6          }
7      }
8
9      public static int[] m1() {
10         return new int[] { 1, 2, 3 };
11     }
12 }
```

```
PS E:\Day7-06-8-24> & 'C:\Program Files\Java\jdk-17a7fb03b991bceed5ffc\redhat.java\jdt
1 2 3
```

7)

```
J ArrEx10.java > ...
1  public class ArrEx10 {
    Run | Debug
2      public static void main(String[] args) {
3          int intArray[] = new int[3];
4          byte byteArray[] = new byte[3];
5          short shortsArray[] = new short[3];
6          String[] strArray = new String[3];
7          System.out.println(intArray.getClass());
8          System.out.println(intArray.getClass().getSuperclass());
9          System.out.println(byteArray.getClass());
10         System.out.println(shortsArray.getClass());
11         System.out.println(strArray.getClass());
12     }
13 }
```

```

PS E:\Day7-06-8-24> & 'C:\Program Files\Java\
' '-cp' 'C:\Users\student.PROGRAMMING404\AppData
2d7306\bin' 'ArrEx10'
class [I
class java.lang.Object
class [B
class [S
class [Ljava.lang.String;

```

8)

```

J ArrayEx11.java > ...
1  public class ArrayEx11 {
    Run | Debug
2      public static void main(String[] args) {
3          int[] intArray = { 1, 2, 3 };
4          int[] cloneArray = intArray.clone();
5          System.out.println(intArray == cloneArray);
6          for (int i = 0; i < cloneArray.length; i++) {
7              System.out.print(cloneArray[i] + " ");
8          }
9      }
10 }

```

```

PS E:\Day7-06-8-24> e:; cd 'e:\Day7-06-8-24'; &
ng\Code\User\workspaceStorage\1c2cd7110de17a7fb03
false
1 2 3

```

9)

```

J ArrayEx12.java > ...
1  public class ArrayEx12 {
    Run | Debug
2      public static void main(String[] args) {
3          int[][] intArray = { { 1, 2, 3 }, { 4, 5 } };
4          int[][] cloneArray = intArray.clone();
5          System.out.println(intArray == cloneArray);
6          System.out.println(intArray[0] == cloneArray[0]);
7          System.out.println(intArray[1] == cloneArray[1]);
8      }
9  }

```

```
PS E:\Day7-06-8-24> & 'C:\Program Files\
age\1c2cd7110de17a7fb03b991bceed5ffc\redh
false
true
true
```