Day 13 PW Skills Assignment

1. What is the default value of array for different data types? Ans. The default values of array are Integer \rightarrow 0 Double \rightarrow 0.0 Boolean → false String/ Reference → null 2. Can you pass the negative number in Array size? The array size can be zero but NOT negative. Ans. Where does array stored in JVM memory? 3. Ans. **Heap memory** the reference types in Java are stored in heap area. Since arrays are reference types (we can create them using the new keyword) these are also stored in heap area. 4. What are the disadvantageous of array? Ans. **Disadvantages of array:** Fixed size: Arrays have a fixed size that cannot be updated Memory allocation issues: If the size of the array is too large, the system may run out of memory, which can cause the program to crash. • Insertion and deletion issues: Inserting or deleting an element from an array can be inefficient and time-consuming because all the elements after the insertion or deletion point must be shifted to accommodate the change. • Wasted space: If an array is not fully populated, there can be wasted space in the memory allocated for the array. Lack of flexibility: The fixed size and limited support for complex data types can make arrays inflexible compared to other data structures such as linked lists and trees. 5. What is an Anonymous array in java? Give example? Ans. An array in Java without any name is known as an anonymous array. It is an array just for creating and using instantly. class Test { public static void main(String[] args) // anonymous array sum(new int[]{ 1, 2, 3 }); public static void sum(int[] a) int total = 0; for (int i:a) total = total + i; System.out.println("The sum is: " + total); }

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6. What are the different ways to traverse an Array in java?

Ans. We

We can traverse the array using the iterative statements

- For loop
- For-each loop
- While loop
- Do while loop

7. What is the difference between length and length() method, Give example?

Ans.

The length is an instance variable of an array in Java whereas length() is a method of String class.

Using the length

```
public class Length {
  public static void main(String args[]) {
    int array[] = {1, 2, 3, 4, 5, 6, 7};
    System.out.println("Length of an array is: " + array.length);
  }
}
```

Using the length()

```
public class LengthMethod {
  public static void main(String args[]) {
    String str = "Computer Science";
    System.out.println("Length of String using length() method is: " + str.length());
  }
}
```