

B.Hanumanthu-ISTE60

1.Create an array of integers and use a for loop to print out each element of the array.

```
import java.util.Scanner;

public class Array{

    public static void main(String args[]){

        Scanner s = new Scanner(System.in);

        System.out.print("Enter the Size of Array: ");

        int n = s.nextInt();

        int arr[] = new int[n];

        System.out.println("Enter "+n+" elements: ");

        for(int i = 0 ; i< n; i++){

            arr[i] = s.nextInt();

        }

        System.out.println("Given array elements: ");

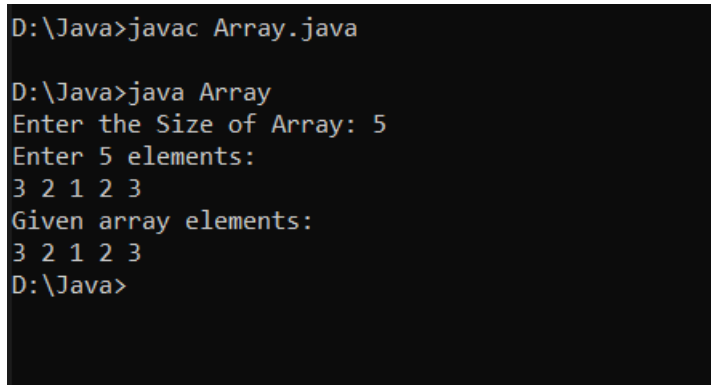
        for(int i = 0 ; i<n;i++){

            System.out.print(arr[i]+" ");

        }

    }

}
```



```
D:\Java>javac Array.java

D:\Java>java Array
Enter the Size of Array: 5
Enter 5 elements:
3 2 1 2 3
Given array elements:
3 2 1 2 3
D:\Java>
```

2.Create an array of strings and use a for-each loop to print out each element of the array.

```
import java.util.Scanner;

public class StrArray {

    public static void main(String args[]){

        Scanner s = new Scanner(System.in);

        System.out.print("Enter the Size of String Array: ");

        int n = s.nextInt();

        String arr[] = new String[n];

        System.out.println("Enter "+n+" elements: ");

        for(int i = 0 ; i< n; i++){
arr[i] = s.next();

        }

        System.out.println("Given array elements: ");

        for(String s1: arr){

            System.out.print(s1+" ");

        }

    }

}
```

```
D:\Java>javac StrArray.java

D:\Java>java StrArray
Enter the Size of String Array: 4
Enter 4 elements:
welcome to java programming
Given array elements:
welcome to java programming
D:\Java>_
```

3.Create an array of doubles and use a while loop to print out each element of the array.

```
import java.util.Scanner;

public class DoubleArray {

    public static void main(String args[]){

        Scanner s = new Scanner(System.in);

        System.out.print("Enter the Size of Array: ");

        int n = s.nextInt();

        double arr[] = new double[n];

        System.out.println("Enter "+n+" elements: ");

        int i;

        for(i = 0 ; i< n; i++){

arr[i] = s.nextDouble();

        }

        System.out.println("Given array elements: ");

        i=0;

        while(i<n){

System.out.print(arr[i]+" ");

        i++;

        }

    }

}
```

```
D:\Java>javac DoubleArray.java
```

```
D:\Java>java DoubleArray
Enter the Size of Array: 4
Enter 4 elements:
1.2 1.3 1.4 1.5
Given array elements:
1.2 1.3 1.4 1.5
D:\Java>_
```

4.Create an array of characters and use a do-while loop to print out each element of the array.

```
public class CharArray {
    public static void main(String args[]){
        char arr[] = { 'h','e','l','l','o'};
        int i =0;
        do{
            System.out.print(arr[i]+" ");
            i++;
        }while(i<arr.length);
    }
}
```

```
D:\Java>javac CharArray.java
```

```
D:\Java>java CharArray
h e l l o
D:\Java>
```

5.Create an array of integers and use the Arrays class method sort() to sort the array in ascending order.

```
import java.util.Scanner;

import java.util.Arrays;

public class ArraySort {

    public static void main(String args[]){

        Scanner s = new Scanner(System.in);

        System.out.print("Enter the size of Array: ");

        int n =s.nextInt();

        System.out.println("Enter the array elements: ");

        int arr[] = new int[n];

        for(int i = 0;i<n;i++){

arr[i]=s.nextInt();

        }

        System.out.println("Array elements before sorting: ");

        for(int x: arr){

System.out.print(x+" ");

        }

        System.out.println();

        Arrays.sort(arr);

        System.out.println("Array elements After sorting: ");

        for(int x: arr){

System.out.print(x+" ");

        }

    }

}
```

```
D:\Java>javac ArraySort.java

D:\Java>java ArraySort
Enter the size of Array: 5
Enter the array elements:
10 5 2 3 15
Array elements before sorting:
10 5 2 3 15
Array elements After sorting:
2 3 5 10 15
D:\Java>
```

6.Create an array of strings and use the Arrays class method `binarySearch()` to find the index of a specific string in the array.

```
import java.util.Arrays;

import java.util.Scanner;

public class ArrayBin {

    public static void main(String args[]){

        Scanner s = new Scanner(System.in);

        System.out.print("Enter the Size of String Array: ");

        int n = s.nextInt();
```

```
        char arr[] = new char[n];

System.out.println("Enter "+n+" elements: ");

        for(int i = 0 ; i< n; i++){

arr[i] = s.next().charAt(0);


        }

System.out.println("Enter the key: ");

        char key = s.next().charAt(0);

System.out.println("Given array elements: ");

        for(char s1: arr){

System.out.print(s1+" ");

        }

System.out.println();

System.out.println("Given key found at index: "+Arrays.binarySearch(arr,
key));


        }

}
```

```
D:\Java>javac ArrayBin.java

D:\Java>java ArrayBin
Enter the Size of String Array: 4
Enter 4 elements:
1 11 6 2
Enter the key:
6
Given array elements:
1 1 6 2
Given key found at index: 2

D:\Java>
```

7.Create a string and use the String class method split() to split the string into an array of substrings.

```
import java.util.Scanner;

public class SplitDemo {

    public static void main(String args[]){

        Scanner s = new Scanner(System.in);

        System.out.println("Enter the String: ");

        String str = s.nextLine();

        String arr[] = str.split(" "); //" " as regex

        for(String s1: arr){

            System.out.println(s1+" ");
        }
    }
}
```



```
    }  
}  
  
}
```

```
D:\Java>javac SplitDemo.java  
  
D:\Java>java SplitDemo  
Enter the String:  
welcome to java  
welcome  
to  
java  
  
D:\Java>_
```

8.Create a string and use the String class method `replace()` to replace a specific substring in the string with a new substring.

```
public class ReplaceDemo {  
  
    public static void main(String args[]){  
  
        String str = "Hello World";  
  
        String str1 = str.replace('l','o');  
  
        System.out.println(str1);  
  
    }  
  
}
```

```
D:\Java>javac ReplaceDemo.java
```

```
D:\Java>java ReplaceDemo  
Heooo Worod
```

```
D:\Java>_
```

9.Create a string and use the String class method substring() to extract a portion of the string.

```
import java.util.Scanner;
```

```
public class SubString {
```

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

```
        Scanner s = new Scanner(System.in);
```

```
        System.out.println("Enter the Input String: ");
```

```
        String str = s.nextLine();
```

```
        String str1 = str.substring(2);
```

```
        System.out.println(str1);
```

```
}
```

```
}
```

```
D:\Java>javac SubString.java
```

```
D:\Java>java SubString
```

```
Enter the Input String:
```

```
Welcome
```

```
lcome
```

```
D:\Java>
```

10.Create a string and use the String class method length() to find the length of the string.

```
import java.util.Scanner;
```

```
public class LengthDemo {
```

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

```
        Scanner s = new Scanner(System.in);
```

```
        System.out.println("Enter the String: ");
```

```
String str = s.nextLine();
```

```
int length = str.length();
```

```
System.out.println("Length of the given String: "+length);
```

```
}
```

```
}
```

```
D:\Java>javac LengthDemo.java
```

```
D:\Java>java LengthDemo
```

```
Enter the String:
```

```
Inheritance
```

```
Length of the given String: 11
```

```
D:\Java>
```