ARRAYS

List of Items of the same type

Defining an array (1)

```
type[ ] arrayName = new type[size];
```

```
int[ ] marks = new int[3];
```

Defining an array (1)

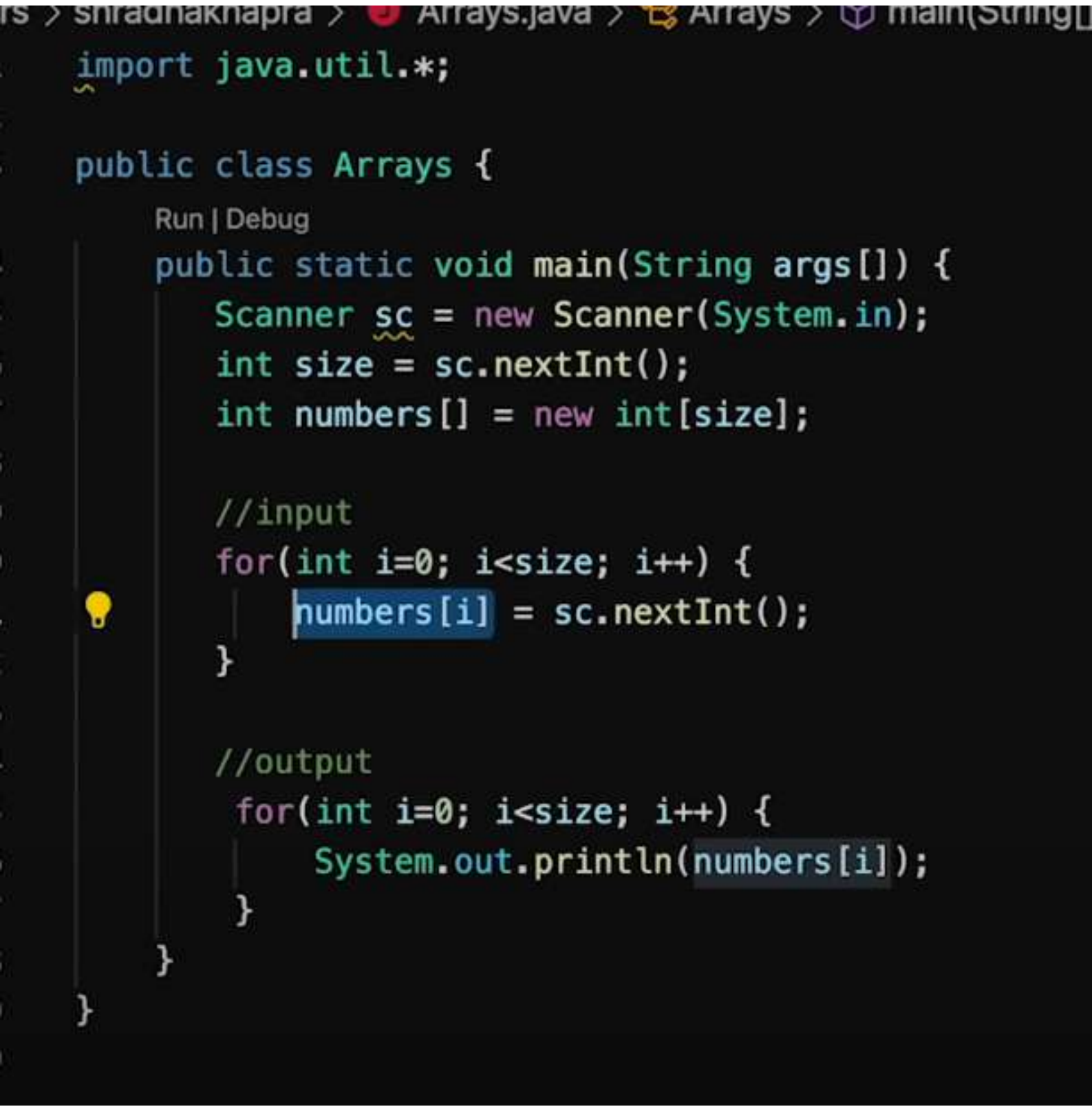
zero-indexed

```
type[ ] arrayName = new type[size];
```

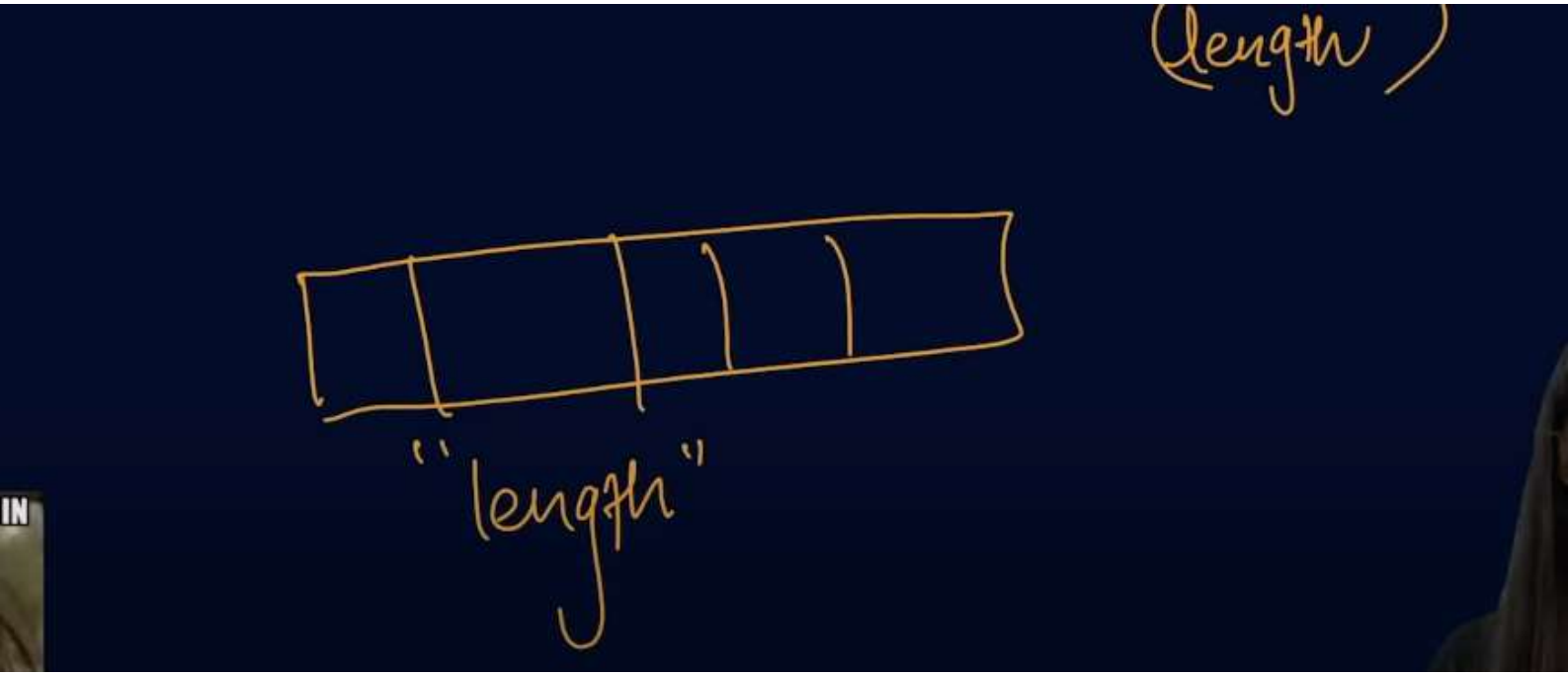
```
int[ ] marks = new int[20];

marks[0] = 97;
marks[1] = 98;
marks[2] = 95;
```

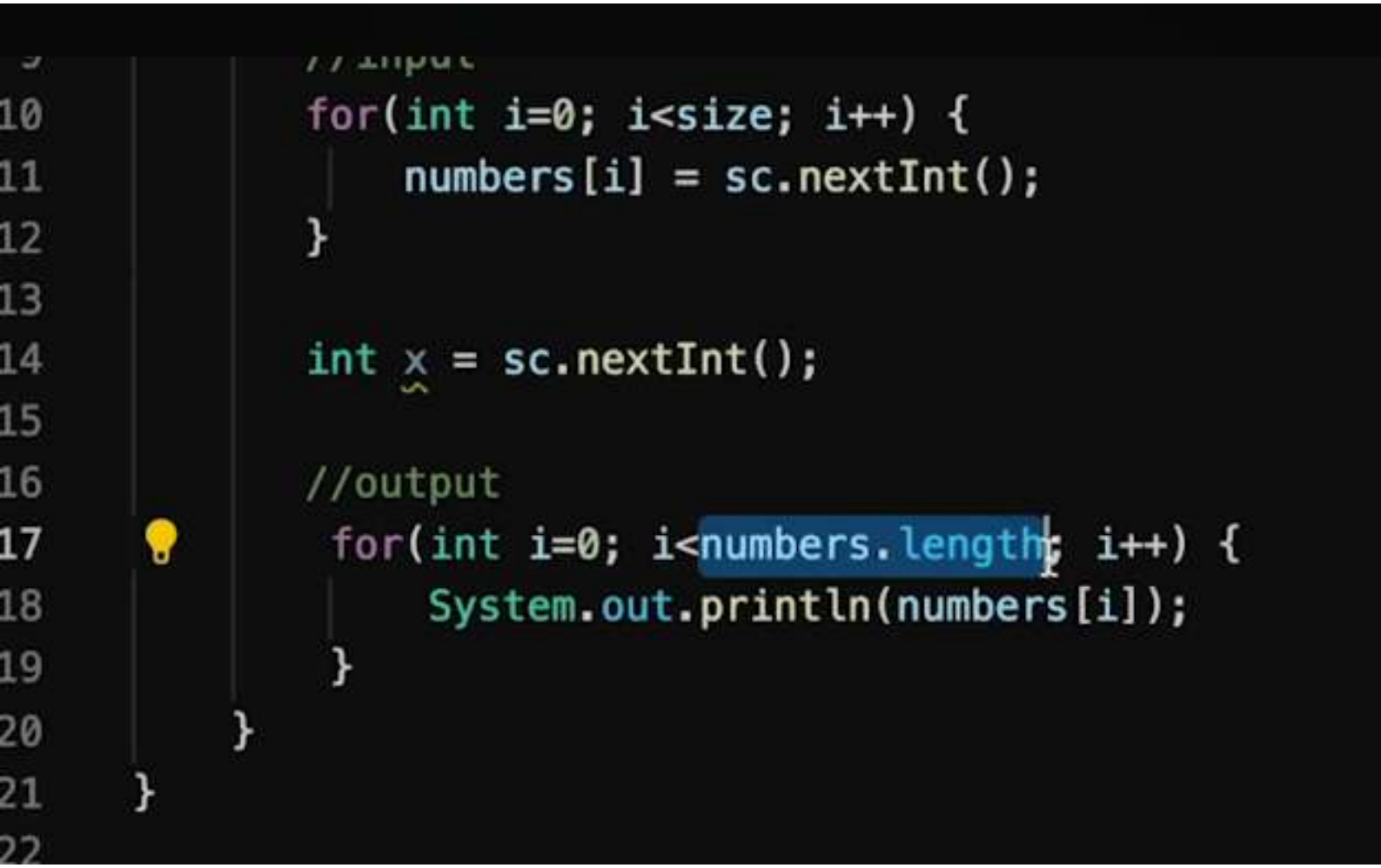
Users > shradhakhapra > Arrays.java > Arrays > main(String

```java
import java.util.*;

public class Arrays {
    Run | Debug
    public static void main(String args[]) {
        // int[] marks = new int[3];
        int marks[] = new int[3];
        marks[0] = 97; // phy
        marks[1] = 98; // chem
        marks[2] = 95; //eng
        // System.out.println(marks[0]);
        // System.out.println(marks[1]);
        // System.out.println(marks[2]);

        for(int i=0; i<3; i++) {
            System.out.println(marks[i]);
        }
    }
}

```


rs > shradhakhapra > Arrays.java > Arrays > main(String[]
import java.util.*;
public class Arrays {
Run | Debug
public static void main(String args[]) {
Scanner sc = new Scanner(System.in);
int size = sc.nextInt();
int numbers[] = new int[size];
//input
for(int i=0; i<size; i++) {
numbers[i] = sc.nextInt();
}
//output
for(int i=0; i<size; i++) {
System.out.println(numbers[i]);
}
}
}

Qs. Take an array as input from the user. Search for a given number x and print the index at which it occurs.


length
"length"


//input
for(int i=0; i<size; i++) {
numbers[i] = sc.nextInt();
}
int x = sc.nextInt();
//output
for(int i=0; i<numbers.length; i++) {
System.out.println(numbers[i]);
}
}
}

```java
//input
for(int i=0; i<size; i++) {
    numbers[i] = sc.nextInt();
}

int x = sc.nextInt();

//output
 for(int i=0; i<numbers.length; i++) {
     if(numbers[i] == x) {
         System.out.println("x found at index : " + i);
     }
 }
```

Qs. Take an array as input from the user. Search for a given number x and print the index at which it occurs.