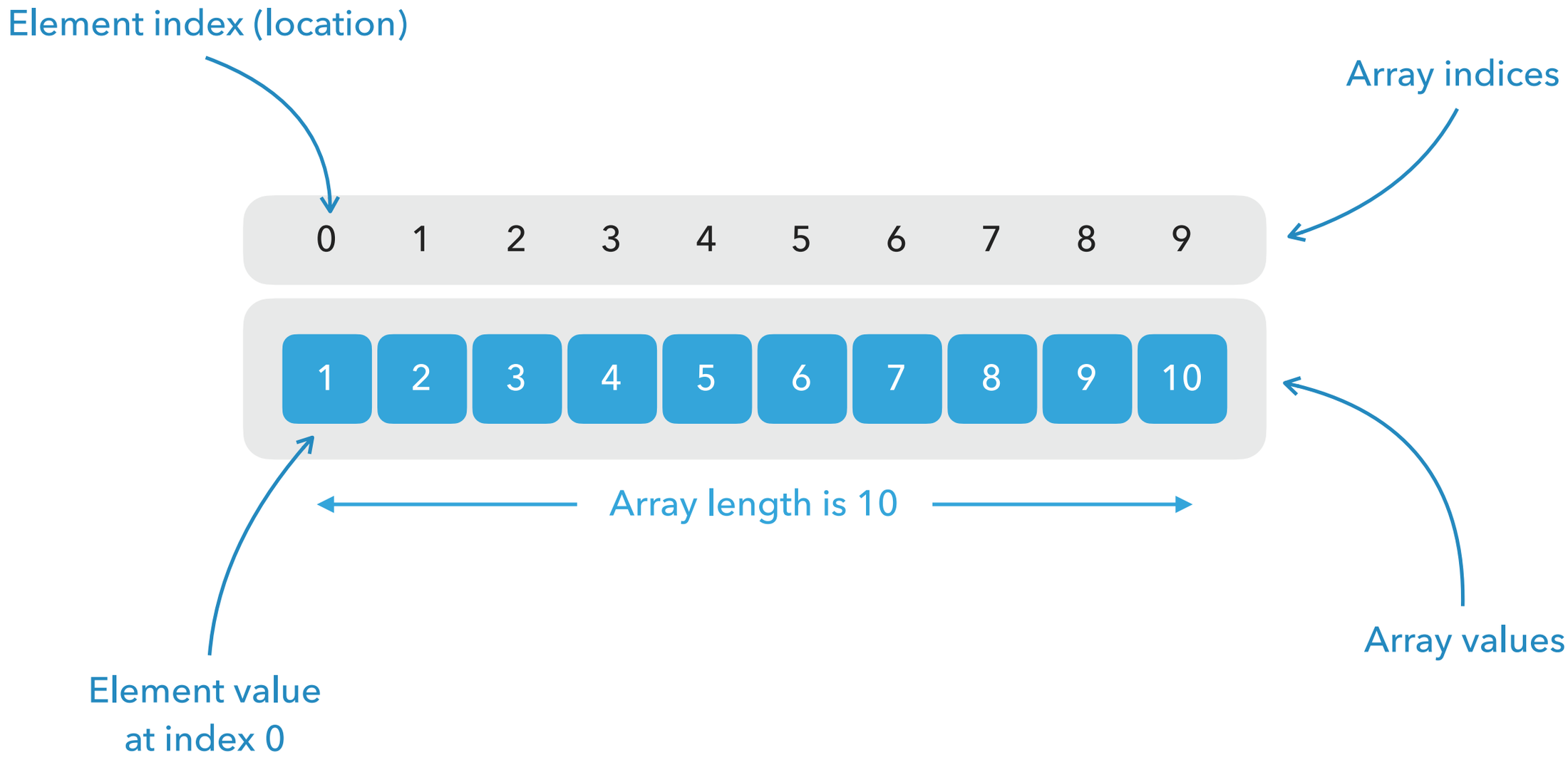
ARRAYS

OVERVIEW

DEFINITION

- An array is a container object that holds a fixed number of values of a single type
- The length of an array is established when the array is created
- After creation, its length is fixed

ARRAYS VISUALISATION



ARRAYS DECLARATION: SYNTAX

- Array declaration without instantiation

```
type[] name;
```

- Array declaration with instantiation

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

- Array declaration with inline initialization

```
type[] name = {var1,.., varN};
```

ARRAY DECLARATION: INSTANTIATION CODE EXAMPLE

Code

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

leapYears[0] = 2020; leapYears[1] = 2016; leapYears[2] = 2012;
System.out.println("Leap years = " + Arrays.toString(leapYears));
```

Console output

```
Leap years = [2020, 2016, 2012]

Process finished with exit code 0
```

ARRAY DECLARATION: INLINE INITIALIZATION CODE EXAMPLE

Code

```
int[] leapYears = {2020, 2016, 2012};

System.out.println("Leap years = " + Arrays.toString(leapYears));
```

Console output

```
Leap years = [2020, 2016, 2012]

Process finished with exit code 0
```