

Arrays in Java

◇ An array is a collection of similar data type values.

◇ Syntax: `datatype[] variable_name = new datatype[size];`

OR

```
datatype[] variable_name;
variable_name = new datatype[size];
```

OR

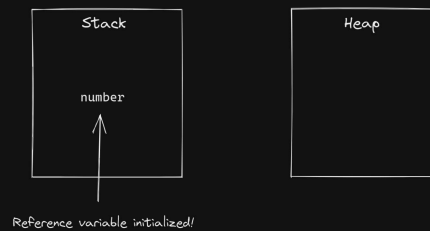
```
datatype[] variable_name = {value1, value2, value3, . . . , valueN};
```

Understanding the Syntax

◇ `datatype[] variable_name;`

This step will initialize the variable and it will get initialized in the stack during compile time.

Example: `int[] number;`

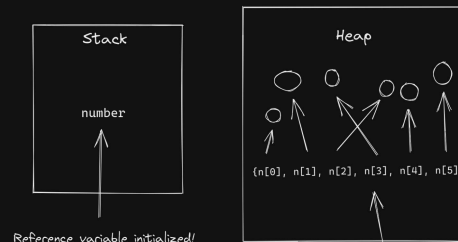


Reference variable initialized!

◇ `variable_name = new datatype[size];`

In this step, a new object will be created in the heap memory during runtime. The 'new' keyword is used to create a new object.

Example: `n = new int[6];`



Reference variable initialized!

A new object is created with a size of six reference variables

If these reference variables have nothing to point to, they will return 'null' when called.