



Array:

variables

```
int x = 20;
int y = 30;
int z = 30;
```

Data-structure



Syntax:

```
Declaration: int x;
Initialization: x = 2;
Initialization: x = 2;
```

Declaration: data-type [] name-of-array;

Initialization: name-of-array = new data-type[size];

Multiplication: 1

Sum: 0

Max: MIN-VALUE

Min: MAX-VALUE

division: 1

Subtract: 0

$$x \times 1 = x$$

$$x + 0 = x$$

$$(x, \text{MIN}) = x$$

$$(x, \text{MAX}) = x$$

$$x / 1 = x$$

$$x - 0 = x$$

Identity of operations:

0's's cumulative multiplication:

num = 2

10
1
2
3
4

o/p: 240

0's's smallest and second smallest:

num = 2

10
2
3
15
16

o/p: 2
5