1. Scope of variable
2. Arrays

Sachin Tendulkar [463]

```
int a1, a2, a3, a4, a5 ...., a463;
a1 = Scn.nextInt()
a2 = Scn.nextInt()
⋮
a463 = Scn.nextInt()
```

$$int\ avg = \frac{(a1 + a2 + a3 + \ldots + a463)}{463}$$

```
Sop(avg)
```

Arrays [Data Structure]

↳ Collection of data [Simple English]

A sequential collection of similar data type [Computer Science]

→ Yes

Key board

Bookshelf

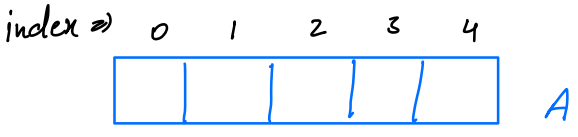
Queue

Data ⇒ Random facts & figures

Info ⇒ Ordered data with meaning

```
int runs[] = new int[463];
                   ↓
                 Size
```

// Array indices



a1, a2 ....

```
A[0] = scn.nextInt()
SOP(A[0])
```

Array has size N

⇒ Index of 1st element ⇒ 0

⇒ " " last element ⇒ n-1

// Array input

```
for(int i=0; i<463; i++){
    runs[i] = scn.nextInt();
}
```

// Array output

```
for(int i=0; i<463; i++){
    SOP(runs[i]);
}
```

```
int sum = 0;
for( int i=0; i< 463; i++){
        sum = sum + runs[i];
}
int avg = Sum / 463
SOP(avg)
```

Break : 10:15

```
int runs [];
runs = new int [463];

int runs [];
int[] runs;
```

SOV : https://www.interviewbit.com/snippet/fa783fa8b889ff2edacf/

1D arrays : https://www.interviewbit.com/snippet/5a03bbd113813e0373d6/