

Arrays → similar type of int^n store.

→ Syntax → $\text{datatype arrayname}[] = \text{new int}(\text{size});$
or

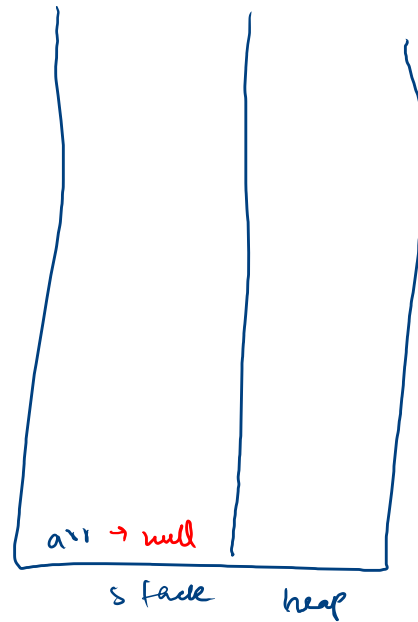
$\text{datatype}[] \text{arrayname} = \text{new int}(\text{size});$

Ex → $\text{int arr}[];$

$\text{arr} = \text{new int}(10);$
↓
heap

$1 \text{ int} = 4 \text{ bytes}$

$10 \text{ int} = 40 \text{ by}$



is syntax:- $\text{datatype} [\text{array name}] = \text{new datatype} (\text{size});$
 or
 $\text{datatype arrayname} [] = \text{new datatype} (\text{size});$

ex- $\text{int} [] \text{arr} = \text{new int} [10];$

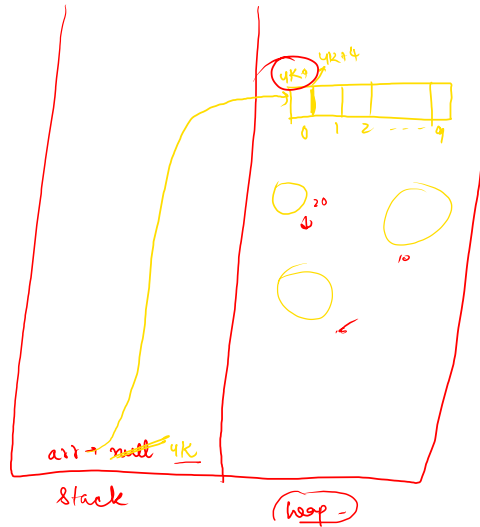
$\text{int arr} [];$

$\text{arr} = \text{new int} [10];$
 ↓
heap

$1 \text{ int} = 4 \text{ bytes}$

$10 \text{ int} = 4 \times 10 = 40 \text{ bytes}$

index & why in array



✓ Why indexing 0?

→ 64th memory allocation.

→ array length

is arr.length → 10

(h)

$\text{for} (\text{int } i = 0; i < n; i++)$

{ $\text{arr}[i] = \text{sum} \cdot \text{arr}[i];$

}

$\text{for} (\text{int } i = 0; i < n; i++)$

{ $\text{length} [\text{arr}[i]];$

Print Alternate

Problem

Submissions

Leaderboard

Discussions

Given an integer n , the task is to define an array `arr[]` of size n & Print only the **alternate elements** starting from 0th index i.e.,

print elements at index -> 0th, 2nd, 4th, 6th..... and so on till the end.

Input Format

1. An integer n , which is the size of the array `arr[]`
2. n integers each in a new line, depicting the elements of the array `arr[]`

1. Alternate elements of the array with each in new line

Sample Input 0

5
2
1
4
3
5

Sample Output 0

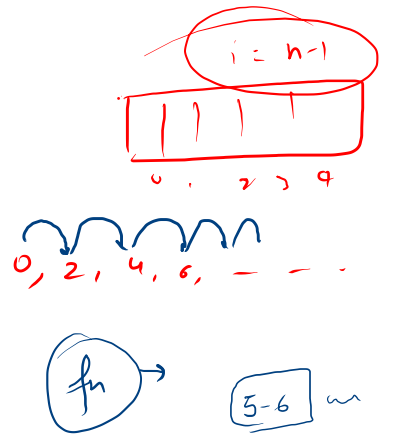
2
4
5

Explanation 0

Since the array is of length 5 and it's elements are {2, 1, 4, 3, 5} therefore, output will be :- 2 4 5 ,with each integer in one line

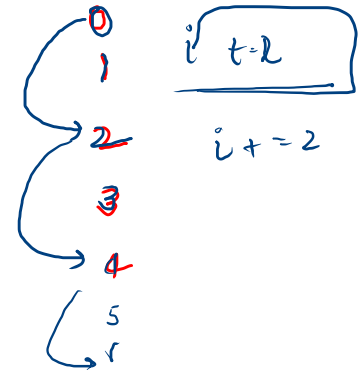
$\text{int } n \rightarrow \text{arr}$
 $\sim \text{arr} \rightarrow \text{arr} \rightarrow n$
`for (`
`)`

$n = 10$



$i++$

0, 2, 4, 6,



Short, long, int.

in long double

Reverse Print 2

Problem

Submissions

Leaderboard

Discussions

Take n as an integer input. Declare an array of size n that stores value of int data-type. Then take n integer inputs and store them in the array one by one.

Then print the elements of the array from the last index till the 0th index such that each element is printed one by one in each line

Sample Input 0

5
1
2
3
4
5

Sample Output 0

5
4
3
2
1

$n \rightarrow$ size of array
syntax \rightarrow arr -
for (—)
{
}
 $n \rightarrow$

arr range $\rightarrow [0, n-1] \rightarrow n$ size array

$n=5$ arr
arr[4]
arr[3]
arr[2]
arr[1]
arr[0]

for (int i=0; i<n; i++)
for (int i=n-1; i>=0; i--)
{
 cout << arr[i] << endl;
}

$i=4 \rightarrow 0(T)$
 $i=3 \rightarrow 0(T)$
 $i=2 \rightarrow 0(T)$
 $i=1 \rightarrow 0(T)$
 $i=0 \rightarrow 0(T)$
 $i=-1 \rightarrow 0(F)$

\rightarrow arr[4] + 5
 \rightarrow arr[3] + 4
 \rightarrow arr[2] + 3
 \rightarrow arr[1] + 2
 \rightarrow arr[0] + 1

Odd Love 4

Problem	Submissions	Leaderboard	Discussions
---------	-------------	-------------	-------------

Take n as an integer input. Declare an array of size n that stores value of int data-type. Then take n integer inputs and store them in the array one by one.

Then print all the elements of the array from the starting which are odd.

6

1

2

3

5

6

8

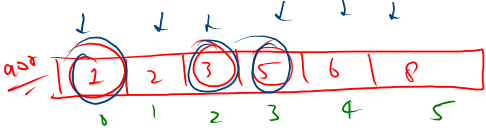
}

Sample Output 0

1 3 5

$n = 6$

$arr[i] \% 2 \neq 0 \rightarrow \text{odd}$



$i = 0 < 6$ (T)
 $i = 1 < 6$ (T)
 $i = 2 < 6$ (T)
 $i = 3 < 6$ (T)
 $i = 4 < 6$ (T)
 $i = 5 < 6$ (T)
 $i = 6 < 6$ (F)

$\rightarrow arr[0] = 1$
 $\rightarrow arr[1] = 2$
 $\rightarrow arr[2] = 3$
 $\rightarrow arr[3] = 5$
 $\rightarrow arr[4] = 6$
 $\rightarrow arr[5] = 8$

$\rightarrow 1 \% 2 \neq 0$ (T) $\rightarrow 1$
 $\rightarrow 2 \% 2 \neq 0$ (F)
 $\rightarrow 3 \% 2 \neq 0$ (T) $\rightarrow 3$
 $\rightarrow 5 \% 2 \neq 0$ (T) $\rightarrow 5$
 $\rightarrow 6 \% 2 \neq 0$ (F)
 $\rightarrow 8 \% 2 \neq 0$ (F)

1 3 5
 $(i \% 2 \neq 0) \rightarrow$

```
for (int i=0; i<n; i++)  
{  
    if (arr[i] % 2 != 0) cout << arr[i] << " ";  
}
```

