

Even and Odd separation in an Array

Algorithm :

Step ①: Start

Step ②: let $i = 0$, $ec = 0$, $oc = 0$, limit; Declare array arr, even, odd

Step ③: Input \leftarrow limit;

--- Read Array Element One by One ---

Step ④: Is ($i < \text{limit}$) then go to step ⑤ otherwise go to step ⑦

Step ⑤: Input \leftarrow Elements of array one by one.

Step ⑥: $i \leftarrow i + 1$, then go to step ④

--- Display Array Elements One by One ---

Step ⑦: $i = 0$ (Resetting i for the next loop)

Step ⑧: Is ($i < \text{limit}$) then go to step ⑨ otherwise go to step ⑪

Step ⑨: Display \leftarrow Elements of array one by one.

Step ⑩: $i \leftarrow i + 1$, then go to step ⑧

--- Even odd Array element Separation ---

Step ⑪: $i = 0$ (Resetting i for the next loop)

Step ⑫: Is ($i < \text{limit}$) then go to step ⑬ otherwise go to step ⑲

Step ⑬: Is ($\text{arr}[i] \% 2 == 0$) then go to step ⑭ otherwise go to step ⑯

Step ⑭: $\text{even}[ec] = \text{arr}[i];$

Step ⑮: $ec \leftarrow ec + 1$; then go to step ⑱ (Jump to skip odd part)

Step ⑯: $\text{odd}[oc] = \text{arr}[i];$

Step ⑰: $oc \leftarrow oc + 1$;

Step ⑱: $i \leftarrow i + 1$, then go to step ⑫

-- Even Array element display One by One ---

Step ⑲: $i = 0$; (Resetting i for the next loop)

Step ⑳: Is ($i < ec$) then go to step ㉑ otherwise go to step ㉓

Step ㉑: Display \leftarrow Elements of even array one by one

Step ㉒: $i \leftarrow i + 1$, then go to step ㉔

-- Odd Array element display One by One ---

Step ②③: $i = 0$; (Resetting i for the next loop)

Step ②④: Is $(i < oc)$ then go to step ②⑤ otherwise go to step ②⑦

Step ②⑤: Display \leftarrow Elements of odd array one by one

Step ②⑥: $i \leftarrow i + 1$, then go to step ②④

Step ②⑦: Stop