

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 ($i < limit$) 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 ($i < limit$) 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 ($i < limit$) then go to step ⑬ otherwise go to step ⑯

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

Step ⑭: $even[ec] = arr[i]$;

Step ⑮: $ec \leftarrow ec + 1$; then go to step ⑯ (Jump to skip odd part)

Step ⑯: $odd[oc] = arr[i]$;

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 ㉓

-- 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