|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **5** | **3** | **8** | **2** | **1** | **6** | **9** | **10** |

0 1 2 3 4 5 6 7

* **STEP 1:** First choose the pivot element you can choose any element as the pivot element.
* **STEP 2:** Place the pivot element in its correct position.
* **STEP 3:** For all the elements that are less than the pivot element put them on the left side. All the elements greater than the pivot are put on the right side.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **3** | **2** | **1** | **5** | **8** | **6** | **9** | **10** |

0 1 2 3 4 5 6 7

* Pivot = arr[0];
* After placing the pivot in its correct position.

|  |  |  |
| --- | --- | --- |
| **3** | **2** | **1** |

|  |  |  |  |
| --- | --- | --- | --- |
| **8** | **6** | **9** | **10** |

* I will start from low goes till < high and it will find the element which is greater than pivot.
* I will start from high goes till > low and it will find the element which is smaller than the pivot.
* Swap arr[i] & arr[j];