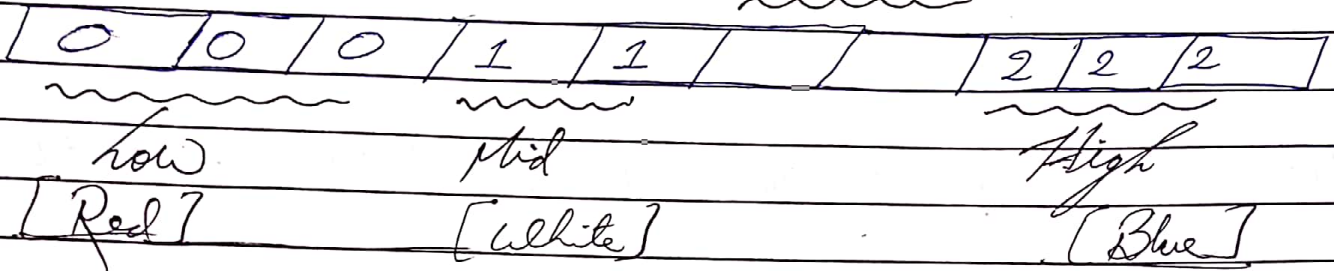


#1 Sort an Array of 0's, 1's and 2's

Method 1 \rightarrow Sort (arr, arr+n)

Method 2 \rightarrow Dutch National Flag

Unknown



RWB \Rightarrow Dutch National flag.

(*) Starting we consider entire array is Unknown.

(*) After applying DNF to convert in field of 0, 1, 2.

(*) Check value of arr[mid]

① if arr[mid] == 0 then swap(arr[low], arr[mid])
low++; mid++;

② if arr[mid] == 1 then mid++;

③ else swap(arr[mid], arr[high]).

```

void Sort012 (int a[], int n)
{
    int l=0; int m=0; int h=n-1;
    while (m <= h)
    {
        if (a[m] == 0)
        {
            Swap(a[l], a[m]);
            l++; m++;
        }
        else if (a[m] == 1)
        {
            m++;
        }
        else
        {
            Swap(a[m], a[h]);
            h--;
        }
    }
}

```