

Doubt class Week-3

Arrays can't be type cast.

Heap \rightarrow Dynamic memory allocation

Stack \rightarrow Static memory allocation

To find size of Array, we have to do $\text{sizeof(arr)} / \text{sizeof(int)}$

To find set bits in a binary representation of a number.

```
count = 0;
```

```
while (n) {
```

```
    n = n & (n - 1);
```

```
    count++;
}
```

Segregate 0's and 1's (AFG)

```
void segregate0and1 (int arr[], int n) {
```

```
    int l = 0;
```

```
    int h = n - 1;
```

```
    while (l < h) { // increment if 0 is in
        if (arr[l] == 0) { // right place.
            l++;
```

```
        } // decrement if 1 is in right place
        else if (arr[h] == 1) {
```

```
            h--;
        }
```

```
    } else { // swap
```

```
        swap(arr[l++], arr[h--]);
    }
```