

⑤ Reverse a number array

- ① initialize array
- ② Take input how much element you need in an array.
- ③ take array as input.
- ④ print array
- ⑤ call function to reverse
start = 0;
end = n-1;
swap(arr[start], arr[end])
start++;
end--;
- ⑥ again print array.

* What is memset function?

memset creates the copies of a character to specific number of times.

Use to fill the empty spaces of an array with some specific character.

To use memset we need to include header file
i.e. #include <bits/stdc++.h>

Syntax of memset func.

memset(array variable name , character you want to print specific no. of time , How many times you want to print)

for int as a datatype for an array

i.e. int arr[10];

memset(arr, -1, size of arr)

memset(arr, 0, size of arr)

} only 0 or -1 can be printed in array for specific no. of time.

* But to print 2, 3, 4, ... 9 any no. for specific no. of time the array must of char datatype. i.e.

- ① char arr[];
memset(arr, '2', sizeof(arr)); → output 2 2 2 2 ...
- ② char arr[];
memset(arr, '4', sizeof(arr)); → output 4 4 4 4 ...
- ③ char arr[];
memset(arr, '9', sizeof(arr)); → output 9 9 9 9 ...

Notes: use for loop to print an array on output screen.

* Reverse the array with another way?

creating temp variable

```
int main() {
    int a[50];
    int n;
    cout << "Enter value of n: ";
    cin >> n;
    for (int i = 0; i < n; i++) {
        cin >> a[i];
    }
    for (int i = 0; i < n; i++) {
        cout << a[i] << " ";
    }
    cout << endl;
    reversearray(arr, n);
    return 0;
}
```

```
void reversearray (int arr[], int n) {
    int temp;
    for (int i = 0; i < n/2; i++) {
        temp = a[i];
        a[i] = a[n-i-1];
        a[n-i-1] = temp;
    }
    for (int i = 0; i < n; i++) {
        cout << a[i] << " ";
    }
}
```

Output
Enter value of n: 5
10 20 30 40 50

Reverse 50 40 30 20 10

with XOR operator

```
int main() {
    int arr[50];
    int n;
    cout << "Enter the no. of; cin >> n;
    for (int i = 0; i < n; i++) {
        cin >> arr[i];
    }
    for (int i = 0; i < n; i++) {
        cout << arr[i] << " ";
    }
    cout << endl;
    reverseArray(arr, n);
}
```

```
void reverseArray(int arr[], int n) {
    for (int i = 0; i < n/2; i++) {
        arr[i] = arr[i] ^ arr[n-i-1];
        arr[n-i-1] = arr[n-i-1] ^ arr[i];
        arr[i] = arr[i] ^ arr[n-i-1];
    }
    for (int i = 0; i < n; i++) {
        cout << arr[i] << " ";
    }
}
```

Output

Enter the no of n: 6

10

20

30

40

50

60

10 20 30 40 50 60

Reverse NO : 60 50 40 30 20 10