

## **Array Problem 7:**

**Sort the array of 0s, 1s, 2s:**

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int n;
```

```
    printf("Enter the size of array: ");
```

```
    scanf("%d", &n);
```

```
    int arr[100];
```

```
    printf("Enter the elements of array: ");
```

```
    for (int i = 0; i < n; i++) {
```

```
        scanf("%d", &arr[i]);
```

```
    }
```

```
    int count0 = 0, count1 = 0, count2 = 0;
```

```
    for (int i = 0; i < n; i++) {
```

```
        if (arr[i] == 0) count0++;
```

```
        else if (arr[i] == 1) count1++;
```

```
        else if (arr[i] == 2) count2++;
```

```
    }
```

```
    for (int i = 0; i < count0; i++) arr[i] = 0;
```

```
    for (int i = count0; i < count0 + count1; i++) arr[i] = 1;
```

```
    for (int i = count0 + count1; i < count0+count1+count2; i++) arr[i] =  
2;  
    for (int i = 0; i < count0+count1+count2; i++) {  
        printf("%d ", arr[i]);  
    }  
  
    return 0;  
}
```