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Enroll - 20UCS176 ; Sec - A

Q.1

```
#include <stdio.h>
int num_of_occurence(int arr[], int len, int NUM){
    int count = 0;
    for (int i = 0; i < len; i++){
        if (arr[i] == NUM) count++;
    }
    return count;
}
void main(){
    int arr = {1, 1, 3, 13, 4, 12};
    int NUM;
    printf("Enter the number : ");
    scanf("%d", &NUM);
    int len = sizeof(arr)/sizeof(arr[0]);
    int count = num_of_occurence(arr, len, NUM);
    Printf("The numbe. of occurences of %d is %d \n",
                                    NUM, count);
}
```

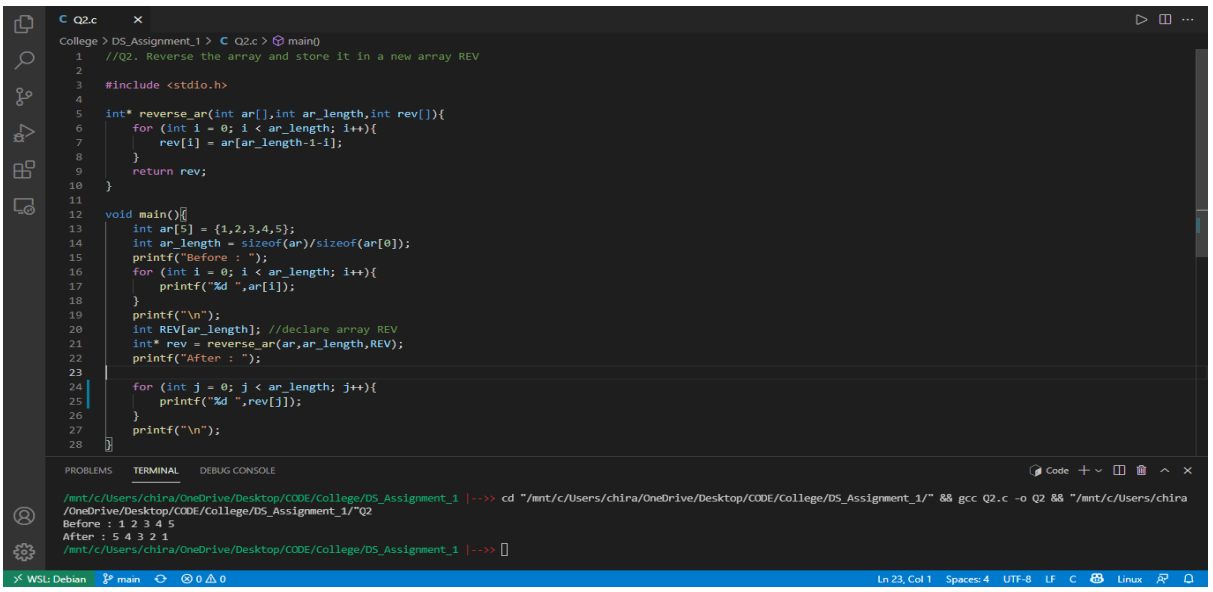
Q.2

```
#include <stdio.h>
int* reverse_arr(int arr[], int len, int rev[]){
    for(int i=0; i<len; i++){
        rev[i] = arr[len-i-1];
    }
    return rev;
}
void main(){
    int arr[5] = {1,2,3,4,5};
    int len = sizeof(arr)/sizeof(arr[0]);
    printf("Before : ");
    for(int i=0; i<len; i++){
        printf("%d ", arr[i]);
    }printf("\n");
    int REV[len];
    int* rev = reverse_arr(arr, len, REV);
    printf("After : ");
    for(int i=0; i<len; i++){
        printf("%d ", rev[i]);
    }printf("\n");
}
```

Q.3

```
#include <stdio.h>

int largest_num(int arr[], int len){
    int max = arr[0];
    for(int i=1 ; i<len ; i++){
        if (max < arr[i])  max = arr[i];
    }
    return max;
}

void main (){
    int arr[5] = {1, 2, 13, 4, 5};
    int len = sizeof(arr) / sizeof(arr[0]);
    int max = largest_num(arr, len);
    printf("MAX : %d\n", max);
}
```

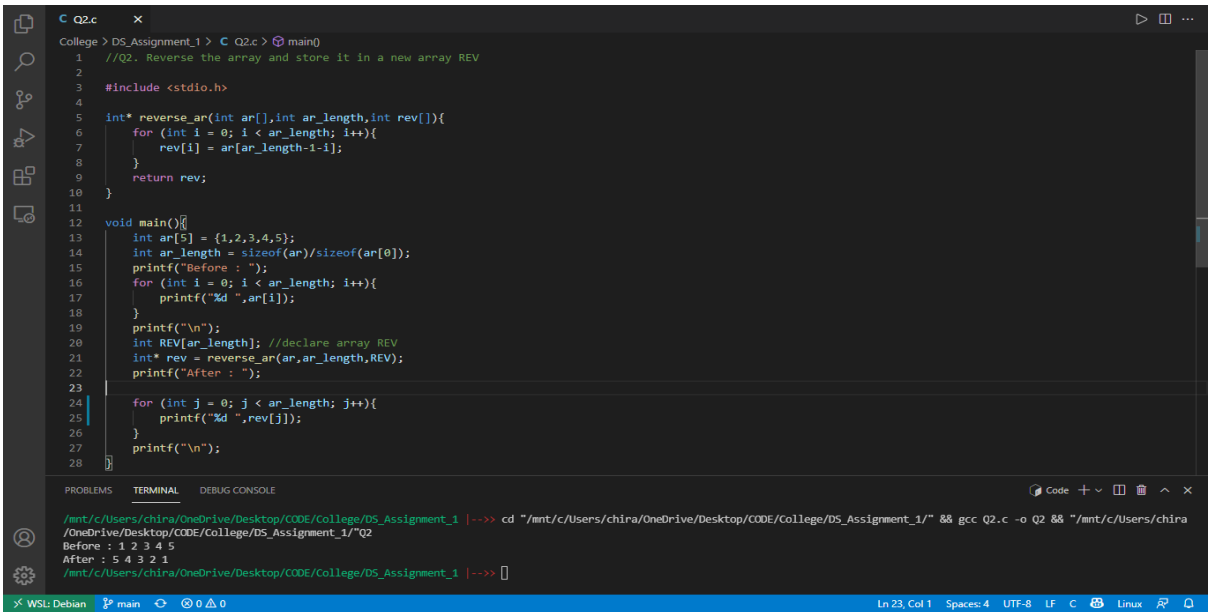
Q1.



```c
//Q2. Reverse the array and store it in a new array REV

#include <stdio.h>

int* reverse_ar(int ar[],int ar_length,int rev[]){
    for (int i = 0; i < ar_length; i++){
        rev[i] = ar[ar_length-1-i];
    }
    return rev;
}

void main(){
    int ar[5] = {1,2,3,4,5};
    int ar_length = sizeof(ar)/sizeof(ar[0]);
    printf("Before : ");
    for (int i = 0; i < ar_length; i++){
        printf("%d ",ar[i]);
    }
    printf("\n");
    int REV[ar_length]; //declare array REV
    int* rev = reverse_ar(ar,ar_length,REV);
    printf("After : ");

    for (int j = 0; j < ar_length; j++){
        printf("%d ",rev[j]);
    }
    printf("\n");
}
```

```
/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1 |-->> cd "/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1/" && gcc Q2.c -o Q2 && "/mnt/c/Users/chira
/OneDrive/Desktop/CODE/College/DS_Assignment_1/"Q2
Before : 1 2 3 4 5
After : 5 4 3 2 1
/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1 |-->>
```

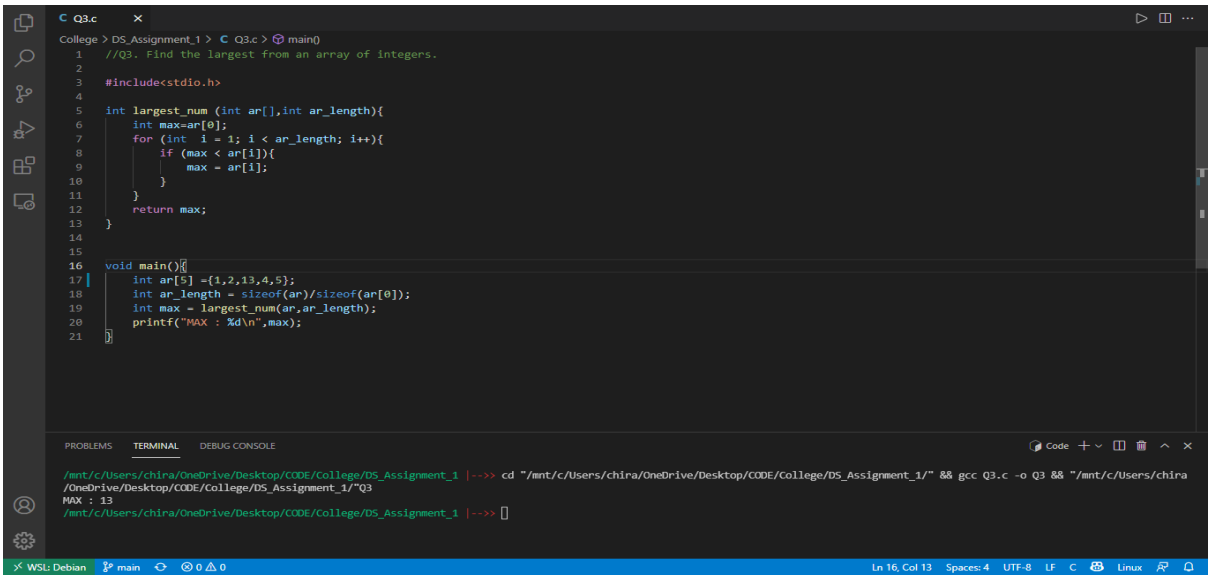
Q2.



```c
//Q2. Reverse the array and store it in a new array REV

#include <stdio.h>

int* reverse_ar(int ar[],int ar_length,int rev[]){
    for (int i = 0; i < ar_length; i++){
        rev[i] = ar[ar_length-1-i];
    }
    return rev;
}

void main(){
    int ar[5] = {1,2,3,4,5};
    int ar_length = sizeof(ar)/sizeof(ar[0]);
    printf("Before : ");
    for (int i = 0; i < ar_length; i++){
        printf("%d ",ar[i]);
    }
    printf("\n");
    int REV[ar_length]; //declare array REV
    int* rev = reverse_ar(ar,ar_length,REV);
    printf("After : ");

    for (int j = 0; j < ar_length; j++){
        printf("%d ",rev[j]);
    }
    printf("\n");
}
```

```
/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1 |-->> cd "/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1/" && gcc Q2.c -o Q2 && "/mnt/c/Users/chira
/OneDrive/Desktop/CODE/College/DS_Assignment_1/"Q2
Before : 1 2 3 4 5
After : 5 4 3 2 1
/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1 |-->>
```

Q3.


Q3.c
College > DS_Assignment_1 > Q3.c > main()
//Q3. Find the largest from an array of integers.
#include<stdio.h>
int largest_num (int ar[],int ar_length){
int max=ar[0];
for (int i = 1; i < ar_length; i++){
if (max < ar[i]){
max = ar[i];
}
}
return max;
}
void main(){
int ar[5] ={1,2,13,4,5};
int ar_length = sizeof(ar)/sizeof(ar[0]);
int max = largest_num(ar,ar_length);
printf("MAX : %d\n",max);
}
PROBLEMS
TERMINAL
DEBUG CONSOLE
Code
/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1 |-->> cd "/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1/" && gcc Q3.c -o Q3 && "/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1/"Q3
MAX : 13
/mnt/c/Users/chira/OneDrive/Desktop/CODE/College/DS_Assignment_1 |-->>
WSL: Debian
main
Ln 16, Col 13
Spaces: 4
UTF-8
LF
C
Linux