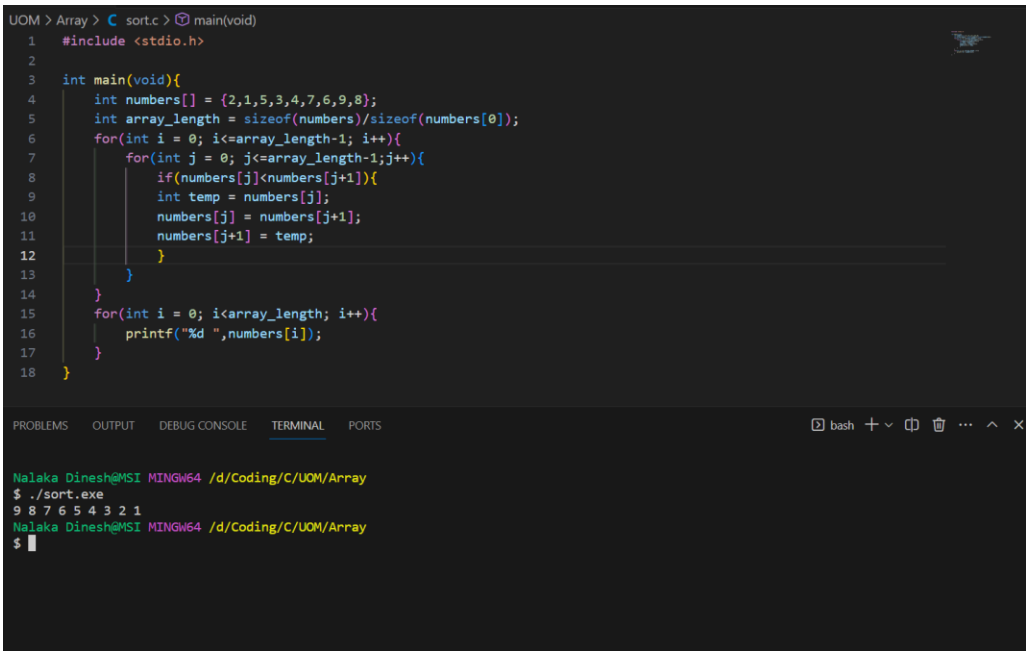
Array Question

225097L

01)



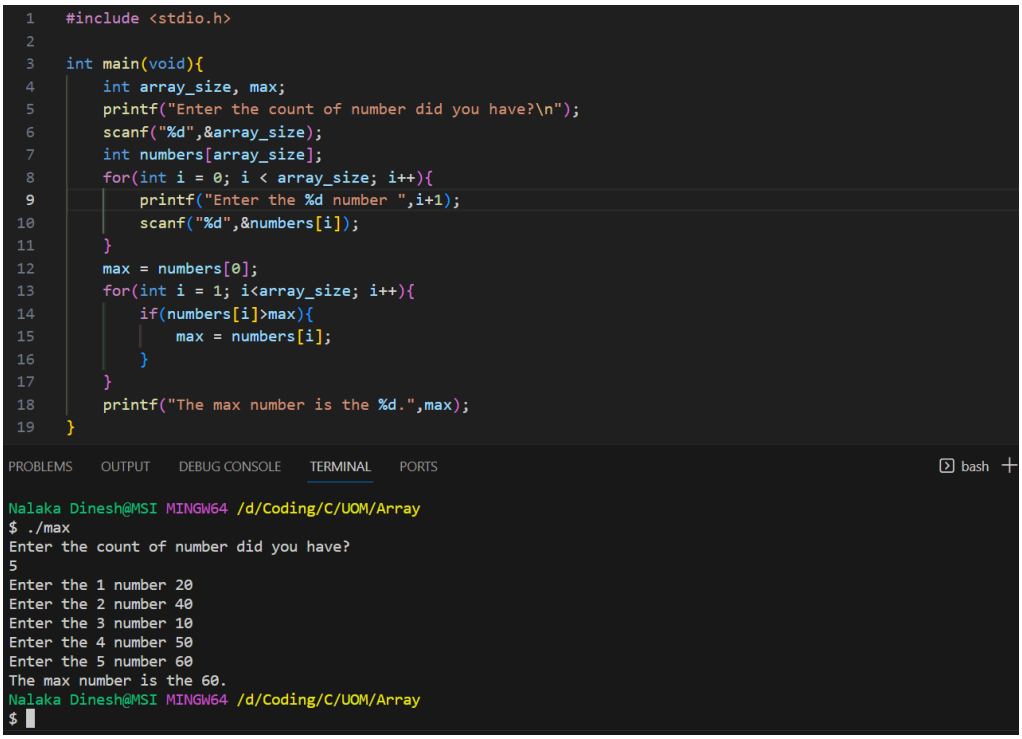
```
UOM > Array > C sort.c > main(void)
#include <stdio.h>

int main(void){
    int numbers[] = {2,1,5,3,4,7,6,9,8};
    int array_length = sizeof(numbers)/sizeof(numbers[0]);
    for(int i = 0; i<=array_length-1; i++){
        for(int j = 0; j<=array_length-1;j++){
            if(numbers[j]<numbers[j+1]){
            int temp = numbers[j];
            numbers[j] = numbers[j+1];
            numbers[j+1] = temp;
            }
        }
    }
    for(int i = 0; i<array_length; i++){
        printf("%d ",numbers[i]);
    }
}
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS        bash

Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$ ./sort.exe
9 8 7 6 5 4 3 2 1
Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$
```

02)



```
#include <stdio.h>

int main(void){
    int array_size, max;
    printf("Enter the count of number did you have?\n");
    scanf("%d",&array_size);
    int numbers[array_size];
    for(int i = 0; i < array_size; i++){
        printf("Enter the %d number ",i+1);
        scanf("%d",&numbers[i]);
    }
    max = numbers[0];
    for(int i = 1; i<array_size; i++){
        if(numbers[i]>max){
            max = numbers[i];
        }
    }
    printf("The max number is the %d.",max);
}
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS        bash

Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$ ./max
Enter the count of number did you have?
5
Enter the 1 number 20
Enter the 2 number 40
Enter the 3 number 10
Enter the 4 number 50
Enter the 5 number 60
The max number is the 60.
Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$
```

03)

```c
#include <stdio.h>

int main(void){
    int array_size, min;
    printf("Enter the count of number did you have?\n");
    scanf("%d",&array_size);
    int numbers[array_size];
    for(int i = 0; i < array_size; i++){
        printf("Enter the %d number ",i+1);
        scanf("%d",&numbers[i]);
    }
    min = numbers[0];
    for(int i = 1; i<array_size; i++){
        if(numbers[i]<min){
            min = numbers[i];
        }
    }
    printf("The min number is the %d.",min);
}
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$ ./min
Enter the count of number did you have?
5
Enter the 1 number 1
Enter the 2 number 6
Enter the 3 number 0
Enter the 4 number 4
Enter the 5 number 5
The min number is the 0.
Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$
```

04)

UOM > Array > age.c > main(void)

```c
#include <stdio.h>

int main(void){
    int ages[10];
    int count=0;
    for(int i = 0; i<10; i++){
        printf("Enter the %d student age: ",i+1);
        scanf("%d",&ages[i]);
    }
    for(int i = 0; i<10;i++){
        if(17<=ages[i] && 19>=ages[i]){
            count++;
        }
    }
    printf("The number of student between 17-19 is %d.",count);
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
Enter the 1 student age: 17
Enter the 2 student age: 18
Enter the 3 student age: 19
Enter the 4 student age: 20
Enter the 5 student age: 30
Enter the 6 student age: 40
Enter the 7 student age: 17
Enter the 8 student age: 20
Enter the 9 student age: 30
Enter the 10 student age: 10
The number of student between 17-19 is 4.
Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
```

05)

```c
int main(void){
    int array_size;
    printf("How many numbers did you want get multiplication table: ");
    scanf("%d",&array_size);
    int numbers[array_size];
    for(int i = 0; i < array_size; i++){
        printf("Enter the %d number: ",i+1);
        scanf("%d",&numbers[i]);
    }
    for(int i = 1; i < 14 ; i++){
        printf("\t%d",i);
    }
    printf("\n");
    for(int i = 0; i<=array_size-1; i++){
        printf("%d\t",numbers[i]);
        for(int k = 1; k < 14; k++ ){
            printf("%d\t",numbers[i]*k);
        }
        printf("\n");
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS bash

```
Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$ ./multi
How many numbers did you want get multiplication table: 2
Enter the 1 number: 2
Enter the 2 number: 5
        1       2       3       4       5       6       7       8       9       10      11      12      13
2       2       4       6       8       10      12      14      16      18      20      22      24      26
5       5       10      15      20      25      30      35      40      45      50      55      60      65

Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$
```

06)

```c
int main(void){
    int max,min;
    int numbers[10];
    for(int i = 0; i < 10; i++){
        printf("Enter the %d number ",i+1);
        scanf("%d",&numbers[i]);
    }
    min = numbers[0];
    max = numbers[0];
    for(int i = 1; i<10; i++){
        if(numbers[i]<min){
            min = numbers[i];
        }
        if(numbers[i]>max){
            max = numbers[i];
        }
    }
    printf("The min number is the %d max is %d",min,max);
}
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

$ ./maxmin
Enter the 1 number 1
Enter the 2 number 2
Enter the 3 number 3
Enter the 4 number 4
Enter the 5 number 5
Enter the 6 number 6
Enter the 7 number 7
Enter the 8 number 8
Enter the 9 number 0
Enter the 10 number 9
The min number is the 0 max is 9
```

07)

```c
#include <stdio.h>

int main(void){
    int numbers[] = {2,3,4,5,6,7,8,9};
    int value=0;
    float average;
    int array_size = sizeof(numbers)/sizeof(numbers[0]);
    for(int i = 0; i<array_size;i++){
        value+=numbers[i];
    }
    average=(float)value/array_size;
    printf("Average is %f.",average);
}
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$ ./average.exe
Average is 5.500000.
Nalaka Dinesh@MSI MINGW64 /d/Coding/C/UOM/Array
$
```