Welcome | Q1.c M | COMMIT_EDITMSG | Q2.c | Q3.c

Q1.c > main()

You, 21 seconds ago | 1 author (You)

```c
#include<stdio.h>
void main()
{
    printf("ENTER THE NUMBER OF ELEMENTS IN THE BITONIC ARRAY ");
    int n;
    scanf("%d",&n);
    int arr[n];
    printf("ENTER THE %d ELEMENTS OF THE ARRAY \n",n);
    for(int i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }
    int ul=n,ll=0,mid;
    int maxi;
    for(int i=0;i<n;i++)
    {
        if(arr[i]<arr[i+1])
        {
            maxi=i+1;
        }
        if(arr[i]>arr[i+1])
        {
            break;
        }
    }
    printf("\n THE MAXIMUM ELEMENT INDEX NUMBER IS %d",maxi);
    int flag=1;
    while(ll<ul)//BINARY SEARCH HAS TIME COMPLEXITY OF O(log(n))      You, 21 seconds ago • Uncommitted changes
    {
        mid=(ll+ul)/2;
        if(mid==maxi)
        {
            flag=0;
            break;
        }
        if(mid>maxi)
```

Q1.c > main()

```
2   void main()
15      for(int i=0;i<n;i++)
21          if(arr[i]>arr[i+1])
24          }
25      }
26      printf("\n THE MAXIMUM ELEMENT INDEX NUMBER IS %d",maxi);
27      int flag=1;
28      while(ll<ul)//BINARY SEARCH HAS TIME COMPLEXITY OF O(log(ns))      You, 1 second ago • Uncommitted changes
29      {
30          mid=(ll+ul)/2;
31          if(mid==maxi)
32          {
33              flag=0;
34              break;
35          }
36          if(mid>maxi)
37          {
38              ul=mid-1;
39          }
40          if(mid<maxi)
41          {
42              ll=mid-1;
43          }
44
45      }
46      if(flag==0)
47      {
48          printf("\n THE MAXIMUM ELEMENT HAS BEEN FOUND AT %d ",maxi);
49          printf("\n THE MAXIMUM ELEMENT IS %d",arr[maxi]);
50      }
51
52
53  }
54
```

Q1.c > main()

```
2   void main()
15      for(int i=0;i<n;i++)
21          if(arr[i]>arr[i+1])
24          }
25      }
26      printf("\n THE MAXIMUM ELEMENT INDEX NUMBER IS %d",maxi);
27      int flag=1;
28      while(ll<ul)//BINARY SEARCH HAS TIME COMPLEXITY OF O(log(ns))        You, 1 second ago •
29      {
30          mid=(ll+ul)/2;
31          if(mid==maxi)
32          {
33              flag=0;
34              break;
35          }
36          if(mid>maxi)
37          {
38              ul=mid-1;
39          }
40          if(mid<maxi)
41          {
42              ll=mid-1;
43          }
44
45      }
46      if(flag==0)
47      {
48          printf("\n THE MAXIMUM ELEMENT HAS BEEN FOUND AT %d ",maxi);
49          printf("\n THE MAXIMUM ELEMENT IS %d",arr[maxi]);
50      }
51
52
53  }
54
```

```
PS C:\Users\sriva\OneDrive\Desktop\DS Lab> cd "c:\Users\
sriva\OneDrive\Desktop\DS Lab\" ; if ($?) { gcc Q1.c -o
Q1 } ; if ($?) { .\Q1 }
ENTER THE NUMBER OF ELEMENTS IN THE BITONIC ARRAY 6
ENTER THE 6 ELEMENTS OF THE ARRAY
1
2
4
8
7
6

 THE MAXIMUM ELEMENT INDEX NUMBER IS 3
 THE MAXIMUM ELEMENT HAS BEEN FOUND AT 3
 THE MAXIMUM ELEMENT IS 8
PS C:\Users\sriva\OneDrive\Desktop\DS Lab>
```

Q2.c > main()

You, 7 minutes ago | 1 author (You)

```c
#include<stdio.h>
void main()
{
    int n;
    printf("ENTER THE NUMBER OF ELEMENTS IN TNE ARRAY \n");
    scanf("%d",&n);
    printf("ENTER THE %d ELEMENTS OF THE ARRAY \n",n);
    int arr[n],count=0;
    for(int i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }
    for(int i=0;i<n;i++)
    {
        for(int j=i+1;j<n;j++)
        {
            if(arr[i]>arr[j] && i<j)
            {
                count++;
            }
        }
    }
    printf("THE NUMBER OF PERMUTATIONS ARE %d ",count);      You, 7 minutes ago • .
}
```

Q2.c > main()

You, 7 minutes ago | 1 author (You)

```c
#include<stdio.h>
void main()
{
    int n;
    printf("ENTER THE NUMBER OF ELEMENTS IN TNE ARRAY \n");
    scanf("%d",&n);
    printf("ENTER THE %d ELEMENTS OF THE ARRAY \n",n);
    int arr[n],count=0;
    for(int i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }
    for(int i=0;i<n;i++)
    {
        for(int j=i+1;j<n;j++)
        {
            if(arr[i]>arr[j] && i<j)
            {
                count++;
            }
        }
    }
    printf("THE NUMBER OF PERMUTATIONS ARE %d ",count);      You, 7 minutes ago • .
}
```

```
PS C:\Users\sriva\OneDrive\Desktop\DS Lab> cd "c:\Users\
sriva\OneDrive\Desktop\DS Lab\" ; if ($?) { gcc Q2.c -o
Q2 } ; if ($?) { .\Q2 }
ENTER THE NUMBER OF ELEMENTS IN TNE ARRAY
4
ENTER THE 4 ELEMENTS OF THE ARRAY
4
1
3
2
THE NUMBER OF PERMUTATIONS ARE 4
PS C:\Users\sriva\OneDrive\Desktop\DS Lab>
```

ad ⊗ 0 ⚠ 0 0 You, 7 minutes ago Ln 23, Col 56 Spaces: 4 UTF-8 CRLF {} C Go Live Win32 Colorize: 0 variables Colorize Background Prettier

Welcome | Q1.c M | COMMIT_EDITMSG | Q2.c | Q3.c

Q3.c > student

You, 8 minutes ago | 1 author (You)

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

You, 8 minutes ago | 1 author (You)

```c
struct student      You, 8 minutes ago • .
{
    int roll;
    float marks;
    char str[100];
};
    void main()
{
    printf("ENTER THE NUMBER OF STUDENTS ");
    int n;
    scanf("%d",&n);
    struct student aih[n];
    for(int i=0;i<n;i++)
    {
        printf("\n Enter the student roll no \n");
        scanf("%d",&aih[i].roll);
        printf("\n Enter the student marks \n");
        scanf("%f", &aih[i].marks);
        printf("\n Enter the student name \n");
        scanf("%s", &aih[i].str);
    }
    printf("\n STUDENT INFORMATION");
    for(int i=0;i<n;i++)
    {
        printf("\n  roll no %d\n",aih[i].roll);
        printf("\n  marks %f\n",aih[i].marks);
        printf("\n  name %s\n",aih[i].str);
    }

}
```

Welcome | Q1.c M | COMMIT_EDITMSG | Q2.c | Q3.c

Q3.c > student

You, 9 minutes ago | 1 author (You)

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

You, 9 minutes ago | 1 author (You)

```c
struct student      You, 8 minutes ago • .
{
    int roll;
    float marks;
    char str[100];
};
    void main()
{
    printf("ENTER THE NUMBER OF STUDENTS ");
    int n;
    scanf("%d",&n);
    struct student aih[n];
    for(int i=0;i<n;i++)
    {
        printf("\n Enter the student roll no \n");
        scanf("%d",&aih[i].roll);
        printf("\n Enter the student marks \n");
        scanf("%f", &aih[i].marks);
        printf("\n Enter the student name \n");
        scanf("%s", &aih[i].str);
    }
    printf("\n STUDENT INFORMATION");
    for(int i=0;i<n;i++)
    {
        printf("\n  roll no %d\n",aih[i].roll);
        printf("\n  marks %f\n",aih[i].marks);
        printf("\n  name %s\n",aih[i].str);
    }

}
```

Code

```
 Enter the student name
ajay

 Enter the student roll no
2

 Enter the student marks
99

 Enter the student name
amit

 Enter the student roll no
3

 Enter the student marks
100

 Enter the student name
anuj

 STUDENT INFORMATION
  roll no 1

  marks 98.000000

  name ajay

  roll no 2

  marks 99.000000

  name amit

  roll no 3

  marks 100.000000

  name anuj
PS C:\Users\sriva\OneDrive\Desktop\DS Lab>
```

ad ⊗ 0 ⚠ 0 0 | You, 8 minutes ago | Ln 2, Col 1 | Spaces: 4 | UTF-8 | CRLF | { } C | Go Live | Win32 | Colorize: 0 variables | Colorize | Background | Prettier