

NAME: Aishwarya Edke

RLL NO: COSA46

CLASS: SE

```
#include <iostream>
```

```
#include <algorithm>
```

```
#include <vector>
```

```
#include <string>
```

```
using namespace std;
```

```
class student
```

```
{
```

```
public:
```

```
    int rollno;
```

```
    string name;
```

```
    char dob[15];
```

```
    bool operator==(const student &student1)
```

```
    {
```

```
        if(rollno==student1.rollno)
```

```
            return 1;
```

```
            return 0;
```

```
    }
```

```
    bool operator<(const student &student1)
```

```
    {
```

```
        if(rollno<student1.rollno)
```

```
            return 1;
```

```
            return 0;
```

```
    }
```

```
};
vector<student> s1;
void print(student &k);
void display();
void insert();
void search();
void sort1();
void delet();
```

```
bool compare(const student &k, const student &i2)
{
    return(k.rollno<i2.rollno);
}
```

```
int main()
{
    int op;
    do
    {
        cout<<"\n\n\t\t-----<< MENU >>-----";
        cout<<"\n\t\t1.Insert";
        cout<<"\n\t\t2.Display ";
        cout<<"\n\t\t3.Search ";
        cout<<"\n\t\t4.Sort";
        cout<<"\n\t\t5.Delete ";
        cout<<"\n\t\t6.Quit";
        cout<<"\n\t\t-----";
        cout<<"\n\t\tEnter your choice : ";
        cin >> op;
```

```
switch(op)
{
    case 1:
        insert();
        break;

    case 2:
        display();
        break;

    case 3:
        search();
        break;

    case 4:
        sort1();
        cout<<"sorted on roll number";
        display();
        break;

    case 5:
        delet();
        cout<<"After deleting : ";
        display();

        break;

}
}while(op!=6);
return 0;
}
```

```
void insert()
{
    student k;
        cout<<"\nEnter Roll No : ";
    cin>>k.rollno;
    cout<<"\nEnter Name : ";
    cin>>k.name;
    cout<<"\nEnter DOB : ";
    cin>>k.dob;
    s1.push_back(k);
}
```

```
void display()
{
    for_each(s1.begin(),s1.end(),print);
}
```

```
void print( student &i1)
{
    cout<<endl;
    cout<<"Student Name : "<< i1.name<<endl;
    cout<<"Student roll number : "<< i1.rollno<<endl;
    cout<<"Student DOB : "<< i1.dob<<endl;

}
```

```
void search()
{
    vector<student>::iterator p;
```

```

    student k;

    cout<<"\nEnter Student Roll No To Search : ";

    cin>>k.rollno;

    p=find(s1.begin(),s1.end(),k);

    if(p!=s1.end())

        cout<<"Found!!";

    else

        cout<<"\nNot found ";

}

void delet()

{

    student k;

    cout<<"\nEnter Student Roll No To Delete : ";

    cin>>k.rollno;

    vector<student>::iterator p;

    p=find(s1.begin(),s1.end(),k);

    if(p!=s1.end())

        s1.erase(p);

    else

        cout<<"\nNot found ";

}

void sort1( )

{

    sort(s1.begin(),s1.end(),compare);

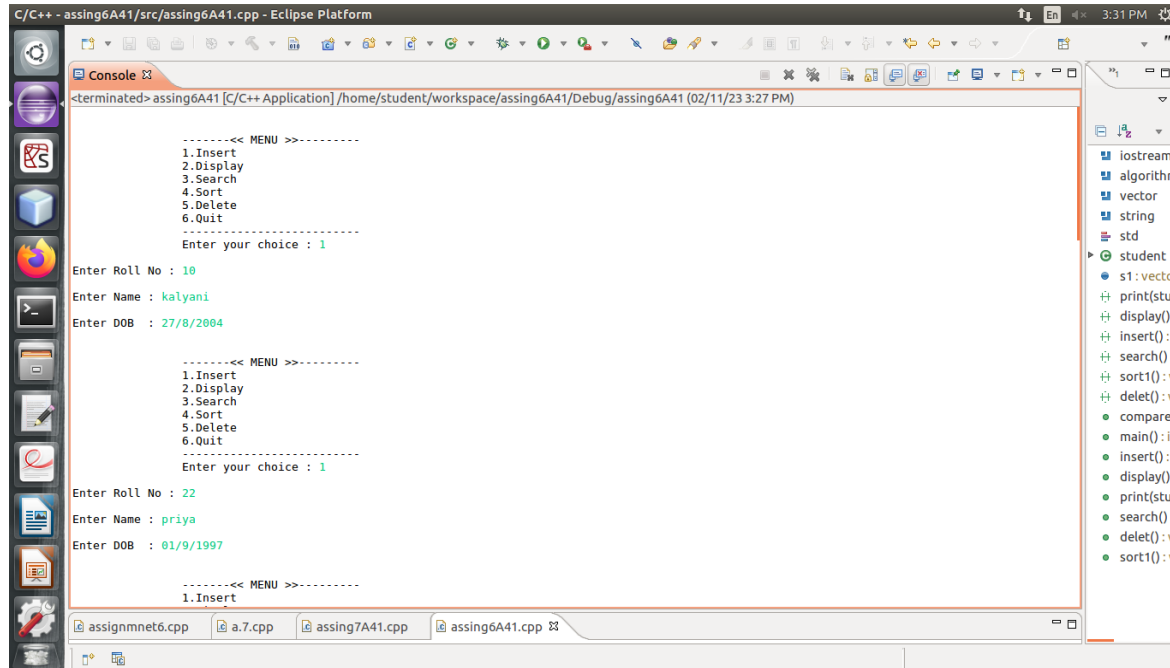
};

```

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```
C/C++ - assing6A41/src/assing6A41.cpp - Eclipse Platform
<terminated> assing6A41 [C/C++ Application] /home/student/workspace/assing6A41/Debug/assing6A41 (02/11/23 3:27 PM)

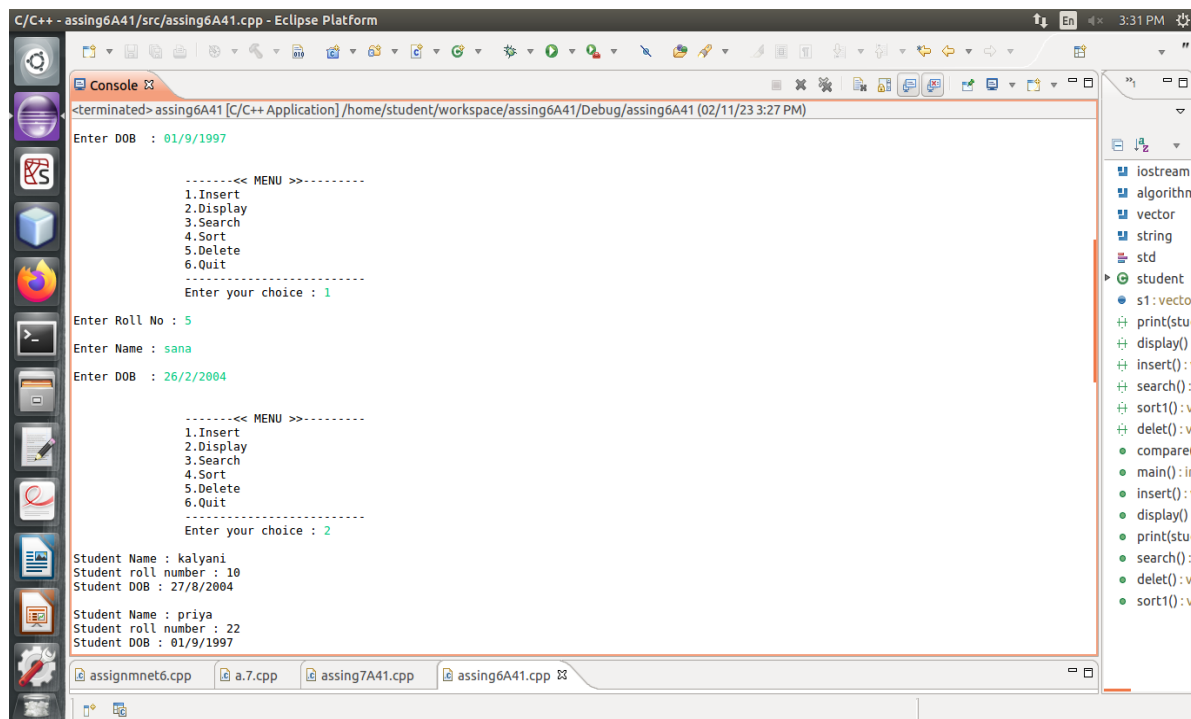
-----<< MENU >>-----
1.Insert
2.Display
3.Search
4.Sort
5.Delete
6.Quit
-----
Enter your choice : 1

Enter Roll No : 10
Enter Name : kalyani
Enter DOB : 27/8/2004

-----<< MENU >>-----
1.Insert
2.Display
3.Search
4.Sort
5.Delete
6.Quit
-----
Enter your choice : 1

Enter Roll No : 22
Enter Name : priya
Enter DOB : 01/9/1997

-----<< MENU >>-----
1.Insert
```



```
C/C++ - assing6A41/src/assing6A41.cpp - Eclipse Platform
<terminated> assing6A41 [C/C++ Application] /home/student/workspace/assing6A41/Debug/assing6A41 (02/11/23 3:27 PM)

Enter DOB : 01/9/1997

-----<< MENU >>-----
1.Insert
2.Display
3.Search
4.Sort
5.Delete
6.Quit
-----
Enter your choice : 1

Enter Roll No : 5
Enter Name : sana
Enter DOB : 26/2/2004

-----<< MENU >>-----
1.Insert
2.Display
3.Search
4.Sort
5.Delete
6.Quit
-----
Enter your choice : 2

Student Name : kalyani
Student roll number : 10
Student DOB : 27/8/2004

Student Name : priya
Student roll number : 22
Student DOB : 01/9/1997
```

C/C++ - assing6A41/src/assing6A41.cpp - Eclipse Platform

Console

```
<terminated> assing6A41 [C/C++ Application] /home/student/workspace/assing6A41/Debug/assing6A41 (02/11/23 3:27 PM)
Student DOB : 01/9/1997
Student Name : sana
Student roll number : 5
Student DOB : 26/2/2004

-----<< MENU >>-----
1.Insert
2.Display
3.Search
4.Sort
5.Delete
6.Quit
-----
Enter your choice : 3

Enter Student Roll No To Search : 5
Found!!

-----<< MENU >>-----
1.Insert
2.Display
3.Search
4.Sort
5.Delete
6.Quit
-----
Enter your choice : 4

sorted on roll number
Student Name : sana
Student roll number : 5
Student DOB : 26/2/2004

Student Name : kalyani
Student roll number : 10
Student DOB : 27/8/2004
```

assignmnet6.cpp | a.7.cpp | assing7A41.cpp | assing6A41.cpp

C/C++ - assing6A41/src/assing6A41.cpp - Eclipse Platform

Console

```
<terminated> assing6A41 [C/C++ Application] /home/student/workspace/assing6A41/Debug/assing6A41 (02/11/23 3:27 PM)
Student DOB : 27/8/2004
Student Name : priya
Student roll number : 22
Student DOB : 01/9/1997

-----<< MENU >>-----
1.Insert
2.Display
3.Search
4.Sort
5.Delete
6.Quit
-----
Enter your choice : 5

Enter Student Roll No To Delete : 22
After deleting :
Student Name : sana
Student roll number : 5
Student DOB : 26/2/2004

Student Name : kalyani
Student roll number : 10
Student DOB : 27/8/2004

-----<< MENU >>-----
1.Insert
2.Display
3.Search
4.Sort
5.Delete
6.Quit
-----
Enter your choice : 6
```

assignmnet6.cpp | a.7.cpp | assing7A41.cpp | assing6A41.cpp