

## Question3.cpp

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1  //<----Lab 01 - Arrays and Dynamic Memory Allocation---->
2
3  //Q3. Suppose you are planning a picnic. You want to store the names of the students of your
4  //    class who have submitted their contribution money. Write a program that uses jagged
5  //    array to store the students' names and then perform a search for your name.
6
7  #include<iostream>
8  #include<string>
9  using namespace std;
10
11 int main(){
12     char** names;
13     string name;
14     int n,loc;
15     cout<<"Enter number of students: ";
16     cin>>n;
17     names = new char*[n];
18     for(int i=0;i<n;i++){
19         cout<<"Enter name of student #"<<i+1<<" : ";
20         fflush(stdin);
21         getline(cin, name);
22         names[i]=new char[name.length()+1];
23         for(int j=0;j<name.length();j++){
24             names[i][j]=name[j];
25         }
26         names[i][name.length()]='\0';
27     }
28     cout<<endl<<endl;
29     for(int i=0;i<n;i++){
30         int j=0;
31         while(names[i][j]!='\0'){
32             cout<<names[i][j];
33             j++;
34         }
35         cout<<endl;
36     }
37     bool found=false;
38     cout<<endl<<endl;
39     cout<<"Enter name to search :";
40     getline(cin, name);
41     for(int i=0;i<n;i++){
42         int j=0;
43         while(names[i][j]==name[j] && names[i][j]!='\0'){
44             j++;
45         }
46         if(names[i][j]=='\0'){
47             found=true;
48             loc=i;
49         }
50     }
51     if(found==true){
52         cout<<"The name was found at index "<<loc<<endl;
53     }
```

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54     else{  
55         cout<<"Name not found"<<endl;  
56     }  
57 }
```