

```
/*
```

```
Name : Amit Bandu Swami
```

```
Roll No. 2221018
```

```
Assignment No. 03
```

```
Title : Student Database
```

```
*/
```

```
//Program
```

```
#include<iostream>
```

```
#include<string.h>
```

```
using namespace std;
```

```
class student
```

```
{
```

```
char name[10];
```

```
int roll_no;
```

```
int age;
```

```
int marks;
```

```
char branch[10];
```

```
public:
```

```
void input()
```

```
{
```

```
cout<<"Enter name:"<<endl;
```

```
cin>>name;
```

```
cout<<"Enter roll no:"<<endl;
```

```
cin>>roll_no;
```

```
cout<<"Age:"<<endl;
```

```
cin>>age;
```

```
cout<<"Enter marks:"<<endl;
```

```
cin>>marks;
```

```
cout<<"Enter branch:"<<endl;
```

```
cin>>branch;
```

```
}
```

```
void output();
```

```
friend void search(student *);
```

```
friend void remove(student *);
```

```
friend void update(student *);
```

```
student();
```

```
};
```

```
student::student()
```

```
{
```

```
strcpy(name,"-99");
```

```
roll_no=-99;
```

```
age=-99;
```

```
marks=-99;
```

```

strcpy(branch, "-99");
}
void search(student *S)
{
int i;
char name[10];
int flag=0;
cout<<"\nEnter the name to search:";
cin>>name;
for(i=0;i<=4;i++)
{
if(strcmp(name,S[i].name)==0)
{
cout<<"Found the Information in database"<<endl;
flag=1;
break;
}
}
if(flag==0)
{
cout<<"No Information with respect to name entered"<<endl;
}
}
void remove(student *S)
{
int i;
char name[10];
int flag=0;
student temp;
cout<<"\nEnter the name to delete:";
cin>>name;
for(i=0;i<=4;i++)
{
if(strcmp(name,S[i].name)==0)
{
cout<<"Found the Information in database"<<endl;
strcpy(S[i].name,temp.name);
S[i].roll_no=temp.roll_no;
S[i].age=temp.age;
S[i].marks=temp.marks;
strcpy(S[i].branch,temp.branch);
flag=1;
break;
}
}
}

```

```

}
if(flag==0)
{
cout<<"No Information with resepct to name entered"<<endl;
}
}
void update (student *S)
{
int i;
char name[10];
int flag=0;
cout<<"Enter the name to search:"<<endl;
cin>>name;
for(i=0;i<=4;i++)
{
if(strcmp(name,S[i].name)==0)
{
cout<<"Found the Information in database"<<endl;
cout<<"Enter the new name for this"<<endl;
cin>>S[i].name;
flag=1;
break;
}
}
if(flag==0)
{
cout<<"No Information with resepct to name entered"<<endl;
}
}
void student::output()
{
if(age!=-99)
cout<<"\n"<<name<<" "<<roll_no<<" "<<age<<" "<<marks<<" "<<branch;
}
int main()
{
int i;
int ch;
student T[5];
while(1)
{
cout<<"\n MENU"<<endl;
cout<<"1. Add Information"<<endl;
cout<<"2. Display Information"<<endl;

```

```

cout<<"3. Search Information"<<endl;
cout<<"4. Delete Information"<<endl;
cout<<"5. Update information"<<endl;
cout<<"6. Exit"<<endl;
cout<<"\n Enter choice:"<<endl;
cin>>ch;
switch(ch)
{
case 1:
for(i=0; i<=4; i=i+1)
T[i].input();
break;
case 2: cout<<"\nHere is the information";
for(i=0; i<=4; i=i+1)
T[i].output();
break;
case 3: search(T);
break;
case 4: remove(T);
break;
case 5: remove(T);
(T);
break;
default:
exit(0);
}
}
}
/*

```

Output

MENU

1. Add Information
2. Display Information
3. Search Information
4. Delete Information
5. Update information
6. Exit

Enter choice:

1

Enter name:

Harry

Enter roll no:

01

Age:

18

Enter marks:

93

Enter branch:

IT

Enter name:

Lily

Enter roll no:

02

Age:

18

Enter marks:

90

Enter branch:

IT

Enter name:

John

Enter roll no:

03

Age:

17

Enter marks:

80

Enter branch:

CS

Enter name:

Steve

Enter roll no:

04

Age:

18

Enter marks:

85

Enter branch:

CS

Enter name:

David

Enter roll no:

05

Age:

17

Enter marks:

87

Enter branch:

IT

MENU

1. Add Information
2. Display Information
3. Search Information
4. Delete Information
5. Update information
6. Exit

Enter choice:

2

Here is the information

Harry 1 18 93 IT

Lily 2 18 90 IT

John 3 17 80 CS

Steve 4 18 85 CS

David 5 17 87 IT

MENU

1. Add Information
2. Display Information
3. Search Information
4. Delete Information
5. Update information
6. Exit

Enter choice:

3

Enter the name to search:David

Found the Information in database

MENU

1. Add Information
2. Display Information
3. Search Information
4. Delete Information
5. Update information
6. Exit

Enter choice:

4

Enter the name to delete:Lily

Found the Information in database

MENU

1. Add Information
2. Display Information
3. Search Information
4. Delete Information
5. Update information

6. Exit

Enter choice:

5

Enter the name to delete:John

Found the Information in database

MENU

1. Add Information

2. Display Information

3. Search Information

4. Delete Information

5. Update information

6. Exit

Enter choice:

6

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