

Aim: To write Program to declare and read value from user for an array whose elements consist of name ,category marks in 5 subjects and registration number .the category can be GEN,SC,ST and OBC .the registration number is a combination of area code, school code, region code serial code and year(YY)

### Source Code:

```
#include<iostream.h>
#include<process.h>
#include<string.h>
#include<conio.h>
#include<stdio.h>
struct reg_no
{
    int area, school, region, year, serial;
};
struct student
{
    char name[20];
    char category[5];
    float marks[5];
    reg_no reg;
};
void main()
{
    clrscr();
    student s[10];
    int cc;
    char flag='n';
    for(int i=0;i<2;i++)
    {
        cout<<"Enter name of student "<<i+1<<" ";
        gets(s[i].name);
        while(cc)
        {
            cout<<"Enter Category (gen,sc,st,obc) ";
            cin>>s[i].category;

            if(strcmp(s[i].category,"gen")==0||strcmp(s[i].category,"st")==0||strcmp(s[i].category,"sc")==0||strcmp(s[i].category,"obc")==0)

            break;
        }
        for(int j=0;j<5;j++)
        {
            cout<<"Enter marks of subject "<<j+1<<" ";
            cin>>s[i].marks[j];
        }
    }
}
```

```

        cout<<"Enter registration no.\n";
        cout<<"Enter area code ";
        cin>>s[i].reg.area;
        cout<<"Enter school code ";
        cin>>s[i].reg.school;
        cout<<"Enter region code ";
        cin>>s[i].reg.region;
        cout<<"Enter serial code ";
        cin>>s[i].reg.serial;
    }
    int choice;
    clrscr();
    cout<<"\n=====
"
        <<"\n                                Registration Programme                                "
        <<"\n=====
";
    cout<<"\nAccessing Data Entered \n";
    for(int j=1;j>0;j++);
    cout<<"1.Search by name\n";
    cout<<"2.Show all data\n";
    cout<<"Enter choice ";
    cin>>choice;
    char name[20];
    if(choice==1)
    {
        label:
        cout<<"Enter name ";
        cin>>name;
        for(i=0;i<2;i++)
        {
            if(strcmp(s[i].name,name)==0)
            {
                cout<<"Category (gen,sc,st,obc)-";
                cout<<s[i].category;
                for(int j=0;j<5;j++)
                {
                    cout<<"\nMarks of subject "<<j+1<<"-";
                    cout<<s[i].marks[j];
                }
                cout<<"\nRegistration no.\n";
                cout<<"Area code-";
                cout<<s[i].reg.area;
                cout<<"\nSchool code-";
                cout<<s[i].reg.school;
                cout<<"\nRegion code-";
                cout<<s[i].reg.region;
                cout<<"\nSerial code-";
                cout<<s[i].reg.serial;
            }
            flag='y';
        }
    }
    if(choice==2)
    ,

```

```

        cout<<"\nCategory (gen,sc,st,obc)-";
        cout<<s[i].category;
        for(int j=0;j<5;j++)
        {
            cout<<"\nMarks of subject "<<j+1<<"-";
            cout<<s[i].marks[j];
        }
        cout<<"\nRegistration no.\n";
        cout<<"Area code-";
        cout<<s[i].reg.area;
        cout<<"\nSchool code-";
        cout<<s[i].reg.school;
        cout<<"\nRegion code-";
        cout<<s[i].reg.region;
        cout<<"\nSerial code-";
        cout<<s[i].reg.serial;
    }
}
if(flag=='n')
{
    cout<<"\nPlease enter name correctly";
    exit(0);
}
getch();
}

```

Output:

```

=====
Registration Programme
=====
Accessing Data Entered
1.Search by name
2.Show all data
Enter choice 1
Enter name Harshit
Category (gen,sc,st,obc)-gen
Marks of subject 1-97
Marks of subject 2-96
Marks of subject 3-100
Marks of subject 4-93
Marks of subject 5-92
Registration no.
Area code--20980
School code--5348
Region code-26564
Serial code-100_

```