

```
//assignment 7
```

```
#include <iostream>
using namespace std;
```

```
template<class T>
class vector{
    T v[20];
    int n;
public:
    void create();
    void modify();
    void mult();
    void display();
};
```

```
template<class T>
void vector<T>::create(){
    cout<<"Enter no of elements you want to insert"<<endl;
    cin>>n;
    cout<<"Enter the vector elements: ";
    for(int i=0;i<n;i++){
        cin>>v[i];
    }
}
```

```
template<class T>
void vector<T>::mult()
{
    int i;
    int x;
    cout<<"\nEnter scalar value for multiplication";
    cin>>x;
    for(int i=0;i<n;i++)
        v[i]=v[i]*x;
}
```

```
template<class T>
void vector<T>::modify(){
    int a;
    cout<<"Enter the element that you want to modify";
    cin>>a;
    int b;
    cout<<"Enter the modified element :";
    cin>>b;
    for(int i=0;i<n;i++){
        if(v[i]==a)
            v[i]=b;
    }
}
```

```

template<class T>
void vector<T>::display(){
    cout<<"\nElements in vector are:";
    cout<<" ";
    for(int i=0;i<n;i++){
        cout<<v[i]<<" ";
    }
    cout<<" )";
}

```

```

int main()
{
    int ch;
    vector<int> obj;
do
{
    cout<<"1.Create"<<endl;
    cout<<"2.Display"<<endl;
    cout<<"3.Mult"<<endl;
    cout<<"4.Modify"<<endl;
    cout<<"5.Exit"<<endl;
    cout<<"Enter your choice:";
    cin>>ch;
switch(ch)
{
    case 1:
        obj.create();
        break;
    case 2:
        obj.display();
        break;
    case 3:
        obj.mult();
        break;
    case 4:
        obj.modify();
        break;
    case 5:
        cout<<"\n exit";
        break;
    }
}while(ch!=0);
return 0;
}

```

//assignment 7 output

1.Create

2.Display

3.Mult

4.Modify

5.Exit

Enter your choice:1

Enter no of elements you want to insert

3

Enter the vector elements: 1

2

3

1.Create

2.Display

3.Mult

4.Modify

5.Exit

Enter your choice:3

Enter scalar value for multiplication2

1.Create

2.Display

3.Mult

4.Modify

5.Exit

Enter your choice:4

Enter the element that you want to modify2

Enter the modified element :1

1.Create

2.Display

3.Mult

4.Modify

5.Exit

Enter your choice:2

Elements in vector are:(1 4 6)1.Create

2.Display

3.Mult

4.Modify

5.Exit

Enter your choice:5

exit