

```

1) #include<iostream>

#include<algorithm>

#include<vector>

using namespace std;

int main()
{
    vector< pair <int,int> > vect;

    int arr[]={1,4,5,3,2};

    int arr1[]={10,40,50,30,20};

    int n=sizeof(arr)/sizeof(arr[0]);

    for(int i=0;i<n;i++)
    {
        vect.push_back(make_pair(arr[i],arr1[i]));

        cout<<"before sorting values ";

        cout<<vect[i].first<< " "<<vect[i].second <<endl ;

    }

    //sorting values based on first
    sort(vect.rbegin(),vect.rend());

    for(int i=0;i<n;i++)
    {
        cout<<vect[i].first<< " "<< vect[i].second << endl;

    }
}

```

```

2) #include<iostream>

#include<algorithm>

#include<vector>

using namespace std;

```

```

int main()
{
    int arr[]={4,3,6,2,1,5};
    int n=sizeof(arr)/sizeof(arr[0]);
    vector <int> vect;
    for(int i=0;i<n;i++)
    {
        vect.push_back(arr[i]);
    }
    sort(vect.rbegin(),vect.rend());
    for(int i=0;i<n;i++)
    {
        cout<< "Dsending order= " <<vect[i]<<endl;
    }
    sort(vect.begin(),vect.end());

    cout<<"_____ "<<endl;
    for(int i=0;i<n;i++)
    {
        cout<< "Asending order= " <<vect[i]<<endl;
    }
}

```

3)

```
#include<iostream>
```

```
#include<algorithm>
```

```
#include<stack>
```

```
#include<vector>
```

```

using namespace std;

struct Queue
{
    stack <int> s1,s2;

    void enQueue(int x)
    {
        while(!s1.empty())
        {
            s2.push(s1.top());
            s1.pop();
        }

        s1.push(x);
        while(!s2.empty())
        {
            s1.push(s2.top());
            s2.pop();
        }
    }

    //dequeue an item from the queue
    int deQueue()
    {
        if(s1.empty())
        {
            cout<< " Q is empty";

```

[illegible]