**Assignment 37**

/\*Write C++ program to store first year percentage of students in array. Sort array of floating point numbers in ascending order using quick sort and display top five scores.\*/

========================================================================

**#include** <iostream>

**using** **namespace** std;

**int** **partition**(**float** arr[100],**int** low,**int** high)

{

**float** temp;

**int** pivot,i,j;

pivot=low; //a mai 0 index val

i=low; //

j=high; //

**while**(i<j)

{

**while**((arr[i]<=arr[pivot])&&(i<high))

{

i++;

}

**while**(arr[j]>arr[pivot])

{

j--;

}

**if**(i<j)

{

temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

}

temp=arr[pivot];

arr[pivot]=arr[j];

arr[j]=temp;

**return** j;

}

**void** **quicksort**(**float** arr[100],**int** low,**int** high)

{

**int** j;

**if**(low<high)

{

j=partition(arr,low,high);

quicksort(arr,low,j-1);

quicksort(arr,j+1,high);

}

}

**int** **main**()

{

**float** arr[100];

**int** i,n;

cout<<"\nEnter no of student:";

cin>>n;

cout<<"\nEnter "<<n<<" student scores:";

**for**(i=0;i<n;i++)

cin>>arr[i];

quicksort(arr,0,n-1);

cout<<"\n\*\*\*\*\*After quick sort top five Scores\*\*\*\*\n";

**for**(i=0;i<5;i++)

cout<<arr[i]<<"\t";

**return** 0;

}

Output

Enter no of student:10

Enter 10 student scores:34

23

14

45

47

35

30

42

42

41

\*\*\*\*\*After quick sort top five Scores\*\*\*\*

14 23 30 34 35