**PRACTICAL NO:05**

**PROGRAM**:

#include<iostream>

using namespace std;

#define size 10

int n;

template<class T>

void selection(T A[size])

{

int i,j,Min;

T temp;

for (i=0;i<=n-2;i++)

{

Min=i;

for(j=i+1;j<=n-1;j++)

{

if (A[j]<A[Min])

Min=j;

}

temp=A[i];

A[i]=A[Min];

A[Min]=temp;

}

cout<<"\nThe sorted list is:"<<endl;

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

cout<<" "<<A[i];

}

int main()

{

int i,A[size];

float B[size];

cout<<"\nSelection sort\n";

cout<<"\n\nHandling integer elements"<<endl;

cout<<"how many elements are there ?"<<endl;

cin>>n;

cout<<"enter the integer elements"<<endl;

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

cin>>A[i];

selection(A);

cout<<"\n\nhandling float elements:"<<endl;

cout<<"how many elements are there?"<<endl;

cin>>n;

cout<<"enter the float elements:"<<endl;

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

cin>>B[i];

selection(B);

cout<<endl;

return 0;

}

**OUTPUT**:

Handling integer elements

how many elements are there ?

5

enter the integer elements

21

5

6

9

8

The sorted list is:

5 6 8 9 21

handling float elements:

how many elements are there?

5

enter the float elements:

0.8

1.1

6.5

2.4

1.8

The sorted list is:

0.8 1.1 1.8 2.4 6.5