

<b>Assignment Title:</b>	Write a function template selection Sort. Write a program that inputs, sorts and outputs an integer array and a float array.
<b>Assignment No.:</b>	05
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### Program Code:

```
#include<iostream>
using namespace std;
#define Size 10

int n;
template <class T>
void selection(T a[Size])
{
    int i,j;
    T temp;
    for(i=0;i<n-1;i++)
    {
        for(j=i+1;j<n;j++)
        {
            if(a[j]<a[i])
            {
                temp=a[i];
                a[i]=a[j];
                a[j]=temp;
            }
        }
        cout<<"\nAfter Pass"<<i+1;
        for(int k=0;k<n;k++)
```

```
        {
            cout<<"\t"<<a[k];
        }
    }

    cout<<endl;

    cout<<"\n The sorted List Is...\n";
    for(i=0;i<n;i++)
        cout<<"\t"<<a[i]<<endl;
}

int main()
{
    int i,a[Size];
    float b[Size];
    cout<<"\n Integer Numbers";
    cout<<"\nHow many elements are there?";
    cin>>n;
    cout<<"\nEnter the Integer Numbers"<<endl;
    for(i=0;i<n;i++)
        cin>>a[i];
    selection(a);

    cout<<"\n Float Numbers";
    cout<<"\nHow many elements are there?";
    cin>>n;
    cout<<"\nEnter the float Numbers"<<endl;
    for(i=0;i<n;i++)
        cin>>b[i];
    selection(b);
    return 0;
}
```

### Program Output:

Integer Numbers

How many elements are there?3

Enter the Integer Numbers

105

102

107

After Pass1    102    105    107

After Pass2    102    105    107

The sorted List Is...

102

105

107

Float Numbers

How many elements are there?3

Enter the float Numbers

4.9

3.2

5.7

After Pass1    3.2    4.9    5.7

After Pass2    3.2    4.9    5.7

The sorted List Is...

3.2

4.9

5.7