***************** Assignment No5 *****************

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Write a function template for selection sort that inputs, sorts and outputs an integer array and a float array.

```cpp
#include<iostream>
using namespace std;
int n;
#define size 10
template<class T>
void sel(T A[size])
{
    int i,j,min;
    T temp;
    for(i=0;i<n-1;i++)
    {
        min=i;
        for(j=i+1;j<n;j++)
        {
            if(A[j]<A[min])
            min=j;
        }
        temp=A[i];
        A[i]=A[min];
        A[min]=temp;
    }
    cout<<"\nSorted array:";
    for(i=0;i<n;i++)
    {
```

```cpp
        cout<<" "<<A[i];
    }
}

int main()
{
    int A[size];
    float B[size];
    int i;

    cout<<"\nEnter total no of int elements:";
    cin>>n;
    cout<<"\nEnter int elements:";
    for(i=0;i<n;i++)
    {
        cin>>A[i];
    }
    sel(A);

    cout<<"\nEnter total no of float elements:";
    cin>>n;
    cout<<"\nEnter float elements:";
    for(i=0;i<n;i++)
    {
        cin>>B[i];
    }
    sel(B);
}
```
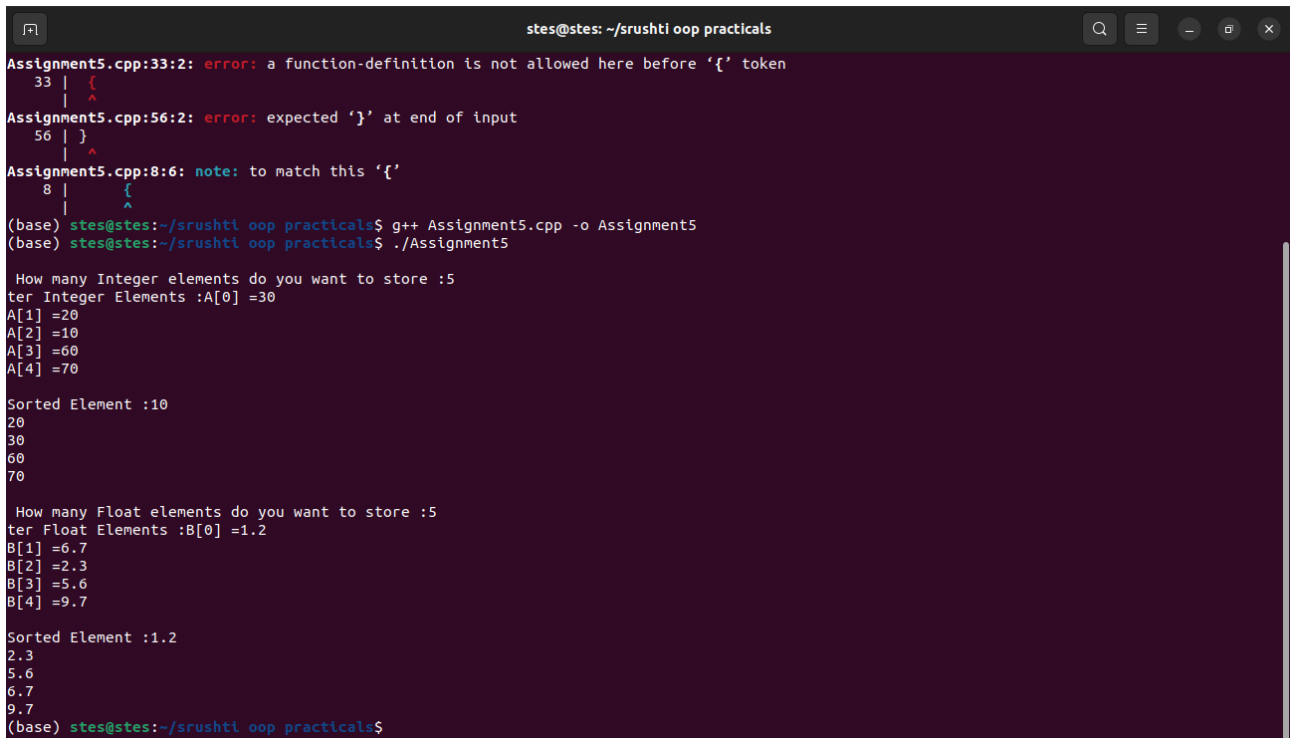
Output:

```cpp
1  #include<iostream>
2  using namespace std;
3  int n;
4  #define size 10
5  template<class T>
6
7      void  selection(T A[size])
8      {
9          int i,j,min;
10         T temp;
11         for(i=0;i<n-1;i++)
12         {
13             min=i;
14             for(j=i+1;j<n;j++)
15             {
16                 if(A[j]<A[min])
17                 {
18                     min=j;
19                 }
20             }
21                 temp=A[i];
22                 A[i]=A[min];
23                 A[min]=temp;
24         }
25         cout<<"\nSorted Element :";
26         for(i=0;i<n;i++)
27         {
```

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Terminal: stes@stes: ~/srushti oop practicals

```
Assignment5.cpp:33:2: error: a function-definition is not allowed here before '{' token
   33 |  {
      |  ^
Assignment5.cpp:56:2: error: expected '}' at end of input
   56 | }
      |  ^
Assignment5.cpp:8:6: note: to match this '{'
    8 |      {
      |      ^
(base) stes@stes:~/srushti oop practicals$ g++ Assignment5.cpp -o Assignment5
(base) stes@stes:~/srushti oop practicals$ ./Assignment5

 How many Integer elements do you want to store :5
ter Integer Elements :A[0] =30
A[1] =20
A[2] =10
A[3] =60
A[4] =70

Sorted Element :10
20
30
60
70

 How many Float elements do you want to store :5
ter Float Elements :B[0] =1.2
B[1] =6.7
B[2] =2.3
B[3] =5.6
B[4] =9.7

Sorted Element :1.2
2.3
5.6
6.7
9.7
(base) stes@stes:~/srushti oop practicals$
```