

Data Structure & Algorithm Lab

Semester 3rd

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Task#1:

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    char H[7]={'s','u','g','a','z','e','y'};
```

```
    int item=0;
```

```
    for (int i = 'a'; i<='z'; i++)
```

```
    {
```

```
        if(i=='g')
```

```
            cout<<"Element 'g' is found successfully:"<<endl;
```

```
        if(i!='m')
```

```
            item = 1;
```

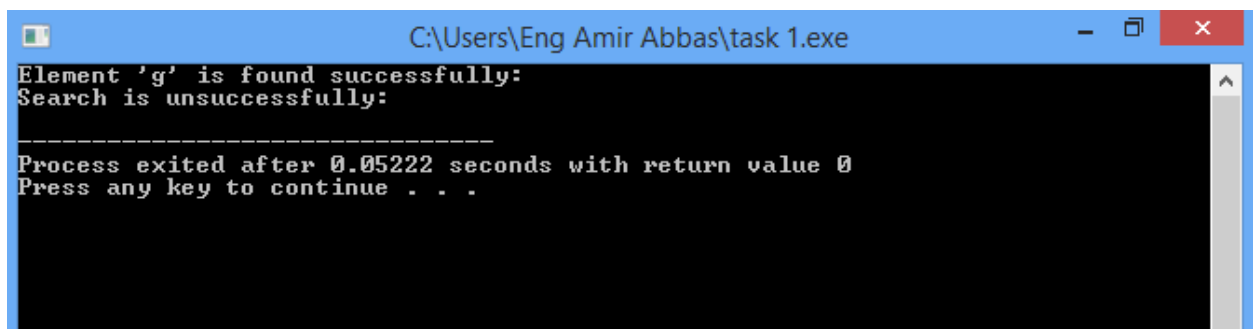
```
    }
```

```
    if (item == 1)
```

```
        cout<<"Search is unsuccessfully:"<<endl;
```

```
    return 0;  
}
```

Result output screenshot



```
C:\Users\Eng Amir Abbas\task 1.exe  
Element 'g' is found successfully:  
Search is unsuccessfully:  
-----  
Process exited after 0.05222 seconds with return value 0  
Press any key to continue . . .
```

Task# 2:

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int A[6]{15,10,12,11,9,10};
```

```
    int k,temp,i;
```

```
    cout<<"the arry before sorting is"<<endl;
```

```
    for(int i=0; i<6; i++)
```

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

```
    cout<<endl;
```

```
    for(i=1;i<6;i++)
```

```
    {
```

```
        temp=A[i];
```

```
        k=i-1;
```

```
while (k>-1 &&A[k]>temp)
```

```
{
```

```
    A[k+1]=A[k];
```

```
    k=k-1;
```

```
}
```

```
    A[k+1]=temp;
```

```
}
```

```
cout<<"the array after sorting is"<<endl;
```

```
for(int i=0;i<6;i++)
```

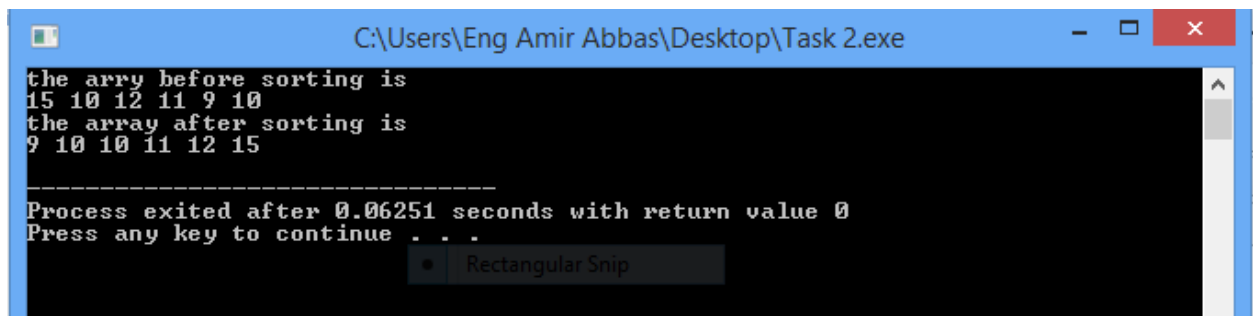
```
    cout<<A[i]<<" ";
```

```
cout<<endl;
```

```
return 0;
```

```
}
```

Result output screen shot



```
C:\Users\Eng Amir Abbas\Desktop\Task 2.exe
the arry before sorting is
15 10 12 11 9 10
the array after sorting is
9 10 10 11 12 15
-----
Process exited after 0.06251 seconds with return value 0
Press any key to continue . . .
```