

Name : \_\_\_\_\_ Date : \_\_\_\_\_

## A+ Computer Science - Sort/Search Worksheet 2

Directions : Fill in the blanks below.

```
public void sort1( Comparable[] list )
{
    int i, j, min;
    for( i=0; i<list.length-1; i++)
    {
        min = i;
        for(j=i+1; j<list.length; j++)
        {
            if(list[min].compareTo(list[j]) > 0)
                min = j;
        }
        if( min != i)
        {
            Comparable temp = list[min];
            list[min] = list[i];
            list[i] = temp;
        }
    }
}
```

```
Integer[] list = {3,15,61,11,7,9,2};
```

Show the contents of list after 4 passes of sort1.

```
public void sort2(Comparable[] list )
{
    for (int i=1; i< list.length; ++i)
    {
        int bot=0, top=i-1;
        while (bot<=top)
        {
            int mid=(bot+top)/2;
            if (list[mid].compareTo(list[i])<0)
                bot=mid+1;
            else top=mid-1;
        }
        Comparable temp=list[i];
        for (int j=i; j>bot; --j)
            list[j]=list[j-1];
        list[bot]=temp;
    }
}
```

```
Integer[] list = {3,15,61,11,7,9,2};
```

Show the contents of list after 5 passes of sort2.