

This assignment explores the implementation of generic algorithms. An algorithm is generic when it adapts to a change in the type of data it manipulates.

Show a Java implementation of a generic search hierarchy. The hierarchy must implement Binary Search algorithm against one(1) predefined and one(1) programmer defined Java data type.

The binary search algorithm is implemented below:

```
int BinSearch(int table[],int start,int finish,int searchKey)
{
    int mid = (start+finish)/2;
    if (finish-start+1 > 0)
    {
        if (table[mid] == searchKey)
            return mid;
        else
            if (searchKey < table[mid])
                return BinSearch(table,start,mid-1,searchKey);
            else
                return BinSearch(table,mid+1,finish,searchKey);
    }
    else
        return -1;
}
```

Staple and submit this assignment in the following order:

- a) UML Class Diagram
- b) A template drawn copy of the program flowchart for main().
- c) A printed listing of source/data files.
- d) A copy of the stub test reports.