Mermaid Code For Bubble Sort

```
graph TD;

    Start --> InputList;

    InputList --> Loop;

    Loop --> CompareAdjacent;

    CompareAdjacent --> |Yes| ContinueLooping;

    CompareAdjacent --> |No| SwapIfNecessary;

    SwapIfNecessary --> ContinueLooping;

    ContinueLooping --> CheckSorted;

    CheckSorted --> |Yes| RepeatIfNecessary;

    CheckSorted --> |No| End;

    RepeatIfNecessary --> Loop;

    End;
```

Mermaid Code For Binary Search

```
graph TD;

    Start --> InitializeVariables;

    InitializeVariables --> CheckBounds;

    CheckBounds --> |low > high| End;

    CheckBounds --> CompareTarget;

    CompareTarget --> |Element equals Target| ReturnIndex;

    CompareTarget --> |Element > Target| UpdateHigh;

    CompareTarget --> |Element < Target| UpdateLow;

    UpdateHigh --> CheckBounds;

    UpdateLow --> CheckBounds;

    ReturnIndex --> End;

    End;
```