

BUBBLE SORT MERMAID CODE

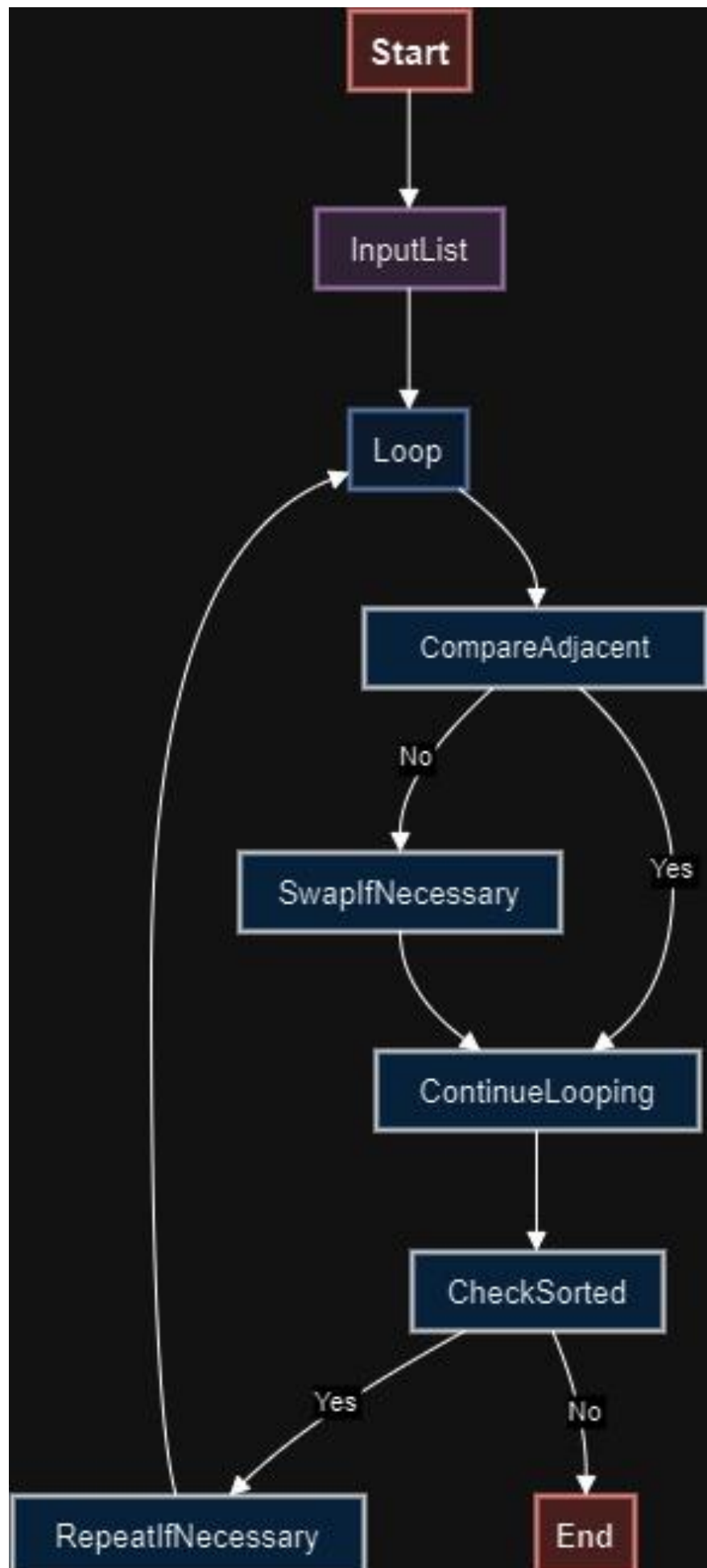
Mermaid Code For Bubble Sort:-

```
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;
```

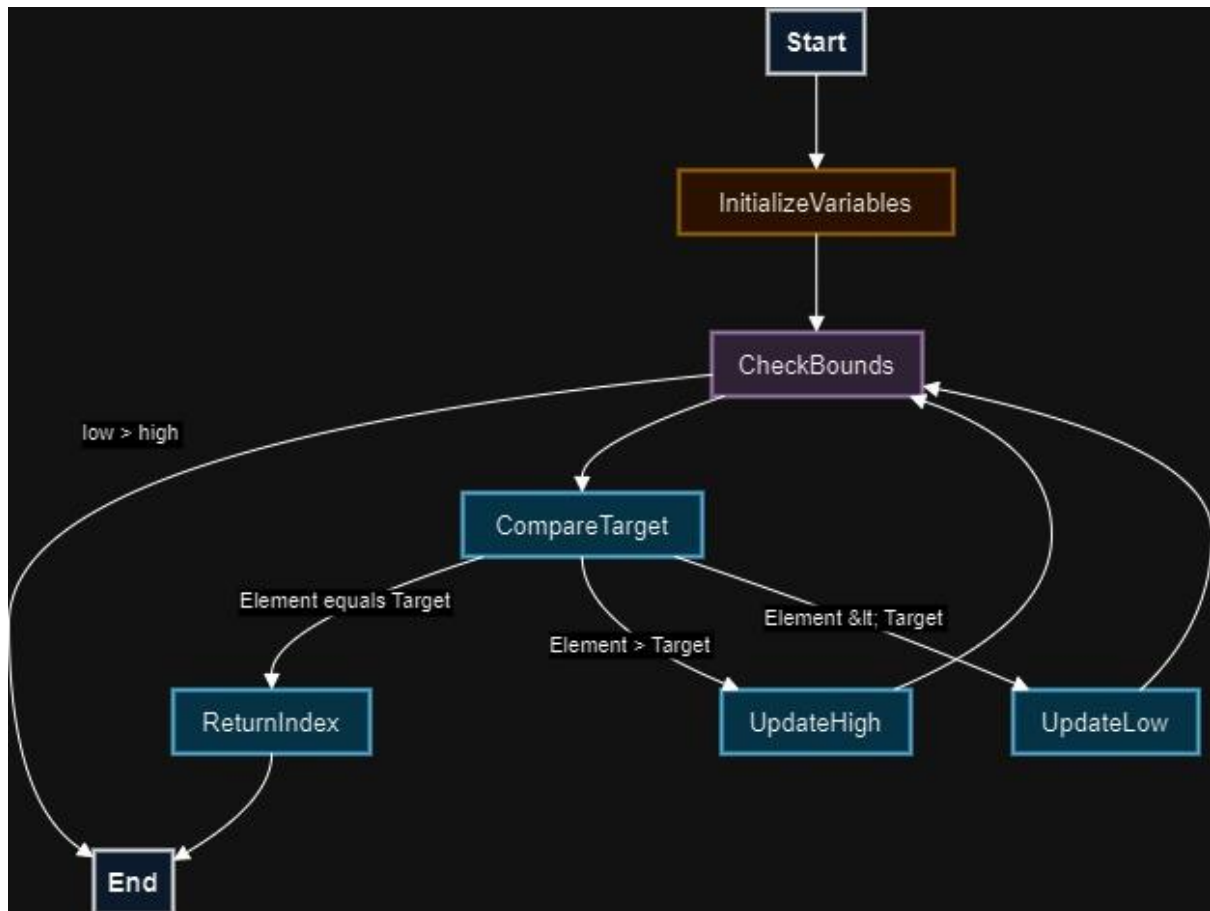
Mermaid Code For Binary Search:-

```
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;
```

BUBBLE SORT:



BINARY SEARCH:



RT: