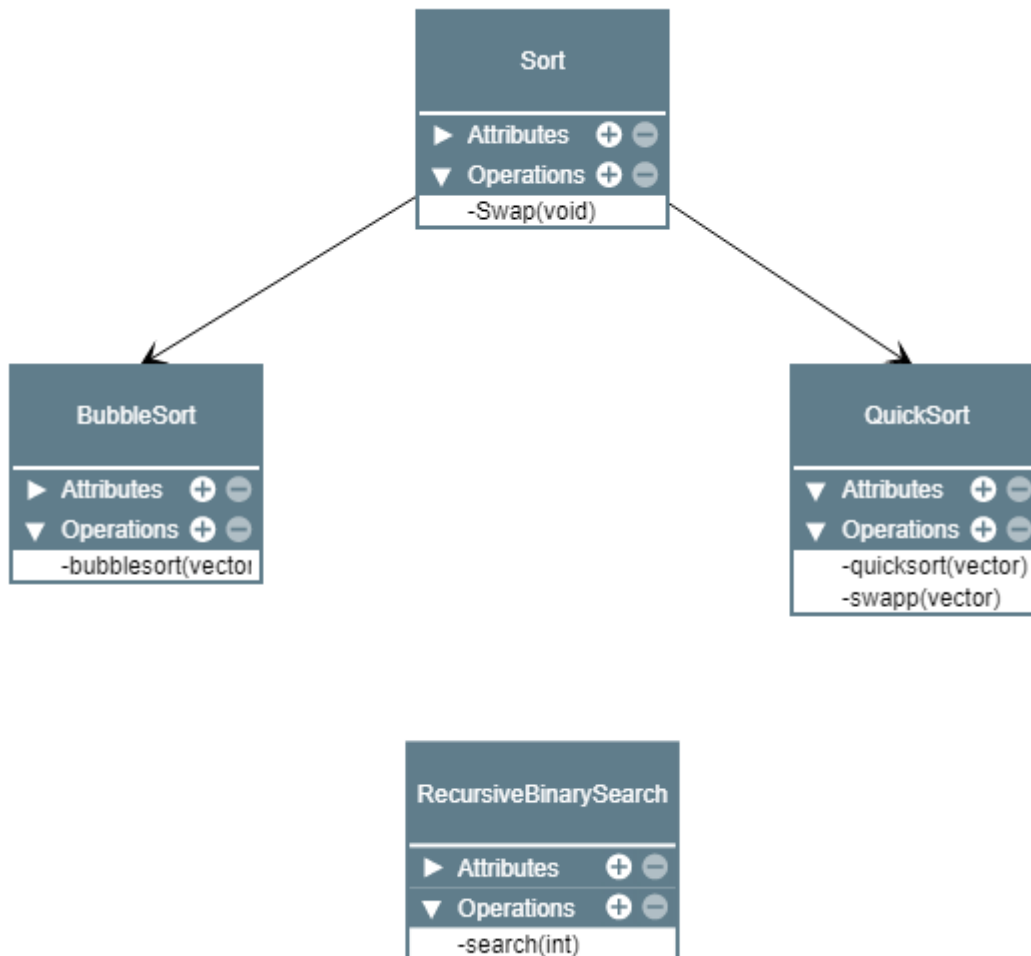


# Design 8

## UML Diagram



sort class includes the swap function and and printarr (but print arr I did not call it ), swap function means to swap two value from this vector

BubbleSort class inherit from sort class ,because this class will call swap function from sort class ,it includes the bubblesort function ,

QuickSort class inherited from sort class ,because this class will call swap function from sort class , and it include quicksort function .

RecursiveBinarySort class includes search function ,if the vectors does not include specific number , this function will return -1 , else it will return index, it in final main part , I will print the words depending on the return value

Test case

```

mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
File Edit View Search Terminal Help
1 8 8 90 0 0 98 7 6
-1false 0 0 1 6 7 8 8 90 98 mint@mint ~/Desktop/a1737480/
8 $ ./test
1 3 3 3 54 54 654
0false 1 3 3 3 54 54 654 mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
BubbleSort.cpp main.cpp QuickSort.cpp RecursiveBinarySearch.cpp
mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8 $ ./test
1 32 456 56 76867 987 9
1 9 32 56 456 987 76867 0false mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
ent8 $ ./test
2 2 2 24 435 34 43 543
2 2 2 24 34 43 435 543 -1false mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
BubbleSort.cpp main.cpp QuickSort.cpp RecursiveBinarySearch.cpp
mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8 $ ./test
1 32 34 545 567 67 878
1 32 34 67 545 567 878 0true mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
t8 $ ./test
9 9 99 9 9 9 9 9 91 1
1 9 9 9 9 9 9 9 91 99 0true mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
8 $ ./test
7 67 8 8 9 9 7 6 5 44 22
5 6 7 7 8 8 9 9 22 44 67 -1false mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
BubbleSort.cpp main.cpp QuickSort.cpp RecursiveBinarySearch.cpp
mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8 $ ./test

```

```

File Edit View Search Terminal Help
ent8 $ ./test
1 32 43 65 76 8689 1
0true 1 1 32 43 65 76 8689 mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
$ ./test
1 23 345 436 6557
0true 1 23 345 436 6557 mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
./test
2 233 43 45 657 5678769 34
-1false 2 34 43 45 233 657 5678769 mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
assignment8 $ ./test
7 8 9 0 0 7 6 5 4 4 4 -1
-1false -1 0 0 4 4 4 5 6 7 7 8 9 mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
nment8 $ ./test
0 9 8 7 66 5 4 4 3 1
-1false 0 1 3 4 4 5 7 8 9 66 mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
BubbleSort.cpp main.cpp QuickSort.cpp RecursiveBinarySearch.cpp
mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8 $ ./test
9 8 7 65 434 3 90 9 87 6 -1
-1false -1 3 6 7 8 9 9 65 87 90 434 mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
signment8 $ ./test
9 9 8 7 7 6 5 544 33 1
-1false 1 5 6 7 7 8 9 9 33 544 mint@mint ~/Desktop/a1737480/2019/s1/adds/assignment8
ent8 $ ./test
0 1 78 17832 784 3873489 43 343

```

