Lab 05

I have included a file binary.py that contains the 2 more advanced types of searches we’ve discussed so far, the binary and interpolation search. The binary search is written as a recursive function, and the interpolation is written as an iterative loop.

1. Modify the binary search to be executed as an iterative loop instead of recursive. It should be defined as:  
   def binary\_search(arr,x):
2. Modify the interpolation search to be executed as a recursive function rather than a single iterative loop. It should be defined as:

def interpolation\_search(arr,beginning\_index,ending\_index,x):

Verify your code works by opening and running the file in test/test\_search.py and see that all tests run without error.