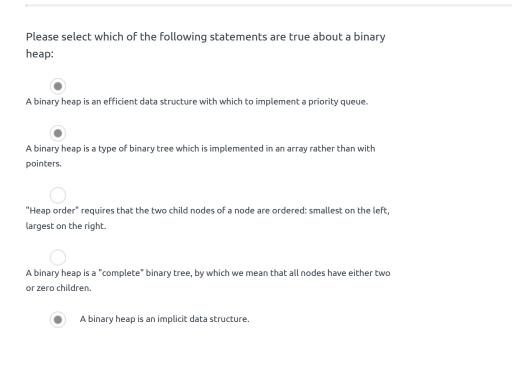
35 minutes

Question v	ON - 1 vith Firstname & Lastname	SCORE: 5 points
Name. If y according character	there is a class Person, containing the First Name and Last you want to implement a sort method to sort a list of Person g to their First Name and Last Name (First based on the first of Last Name and then based on the first character of First hich sort method would be more suitable?	
	Quick Sort	
	Merge Sort	
	Shell Sort	
	Heap Sort	
Question Sorting f	on - 2 or array in reverse order	SCORE: 5 points
Which me insertion sort?	ethod runs faster for an array in reverse order, selection sort o	r
	Insertion sort	
	Selection sort	
•	Same	
Questio Max Prio	on - 3 rity Queue Output for NORTHEASTERN	SCORE: 5 points
letter me applied	that the sequence NORT*H**E*A*ST**E*R*N***. (where a ans insert and an asterisk means remove the maximum) is ally empty priority queue. Give the sequence of letters	
returned	by the	
remove tl	he maximum operations.	
	TRONHSTERNEA	
	TRONHTSERNEA	
	ROTNHTSERNEA	
	ROTNHSTERNEA	



**SCORE: 15 points** 



## Question - 5 Unordered Array MIN Priority Queue

**Minimum Priority queues** are characterized by the *remove the minimum* and *insert* operations.

Unordered Array MIN Priority Queue does not maintain the elements in sorted order.

It simply appends the element in the array and searches for the minimum element on each delete call.

Implement insert and delete methods for MinPQ. Get all Unittests to pass.