**Insertion Sort Project**

This project is an assignment for Data Structures and Algorithms courses on the patika.dev learning platform.

**[22, 27, 16, 2, 18, 6]** -> Insertion Sort

**Question 1)** Write sorting steps for above array according to type of sorting.

* **[2, 27, 16, 22, 18, 6]**
* **[2, 6, 16, 22, 18, 27]**
* **[2, 6, 16, 18, 22, 27]**

**Question 2)** Write Big-O notation for that array.

* n+(n-1)+(n-2)+…+1
* (n^2+n)/2
* O(n^2)

**Question 3)** Which case does the number 18 fall into after the array is sorted?

* Average Case: The number we are looking for is in the middle of the array.
* Worst Case: The number we are looking for is at the end of the array.
* Best Case: The number we are looking for is at the top of the array.

18 is Average Case

**Question 4)** Write first four sorting steps for **[7,3,5,8,2,9,4,15,6**] according to Insertion Sort.

**[2,3,5,8,7,9,4,15,6**]

**[2,3,4,8,7,9,5,15,6]**

**[2,3,4,5,7,9,8,15,6]**

**[2,3,4,5,6,9,8,15,7]**