**BCSE204P- Design and Analysis of Algorithms Lab**

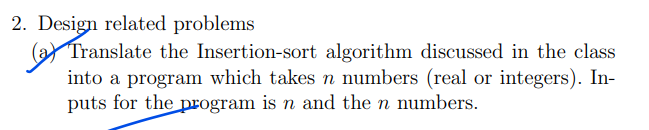
**E1-Slot-L43-L44 Lab**

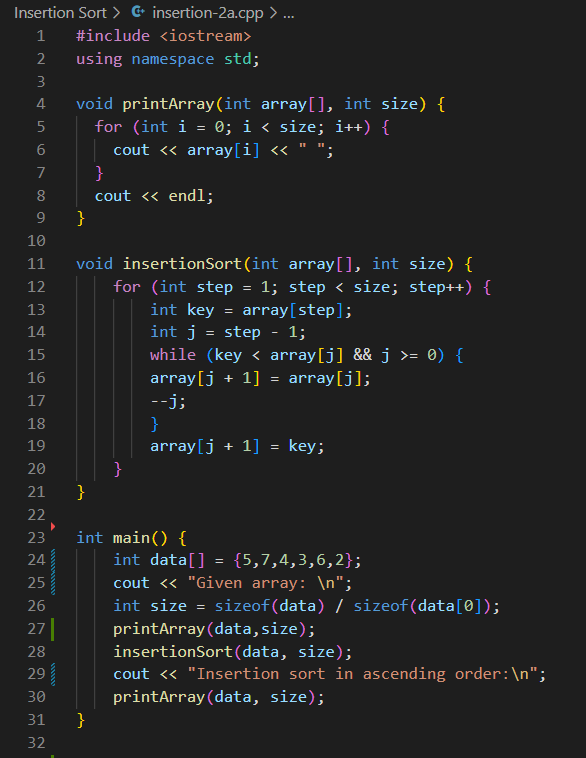
**In-Lab Practice (IPS) Exercise-1**

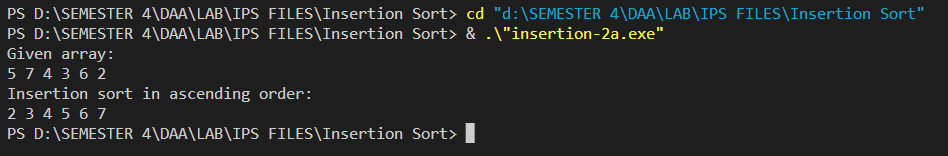
**Name: R. Muhmmad Abrar**

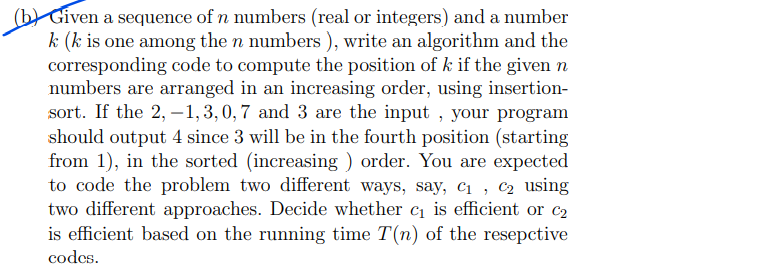
**Register no: 21BRS1713**

**Any one question Output:**

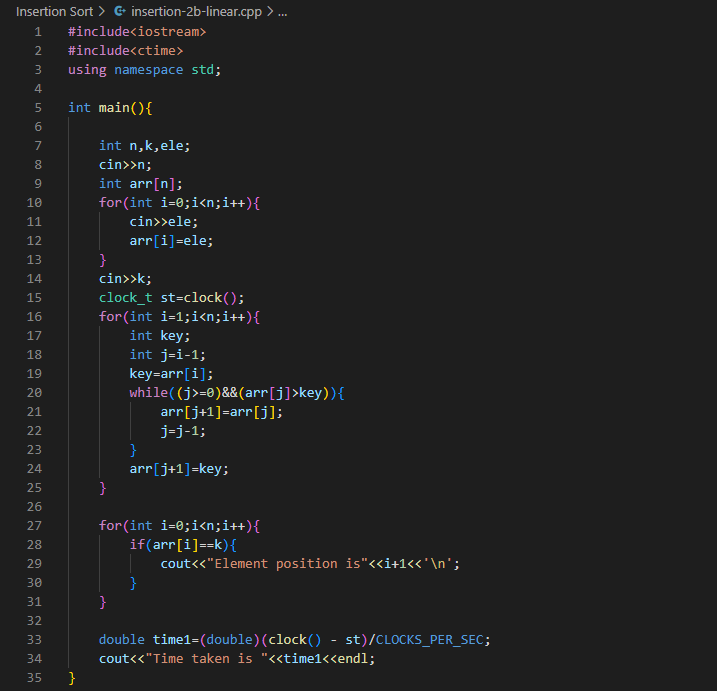


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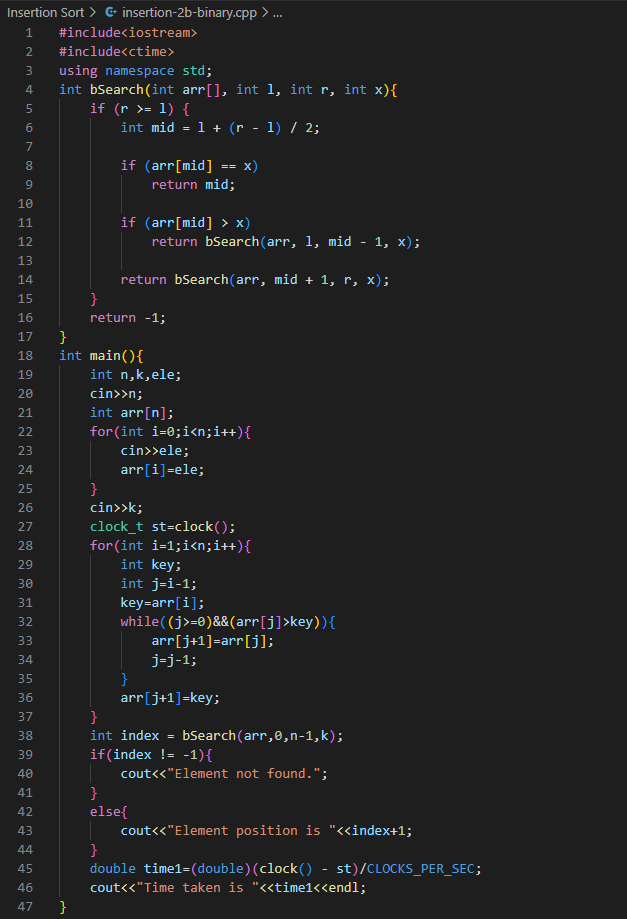
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**Approach c1 [LINEAR SEARCH]**

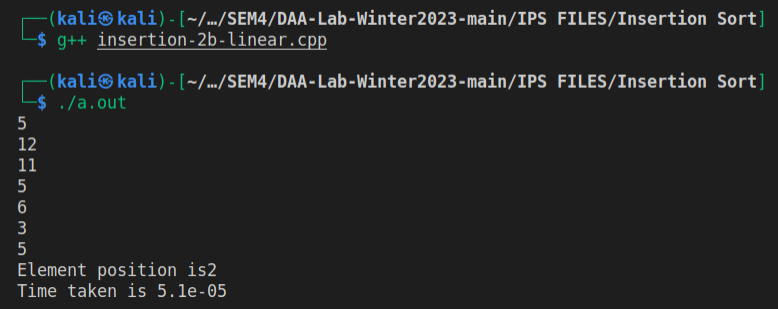
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**Approach c2 [BINARY SEARCH]**

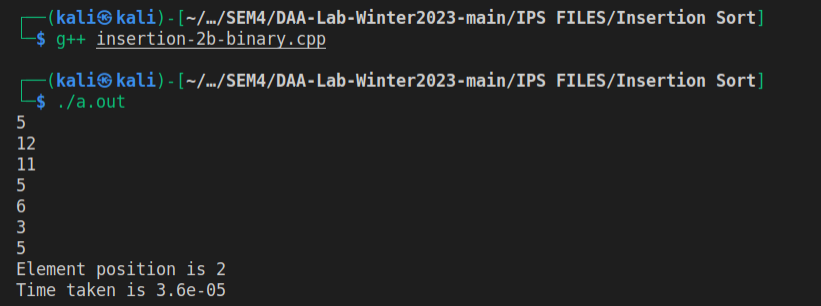
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**Outputs:**

**C1[linear search]**

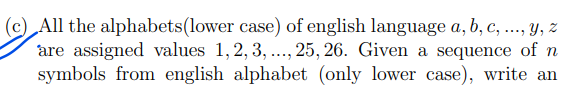
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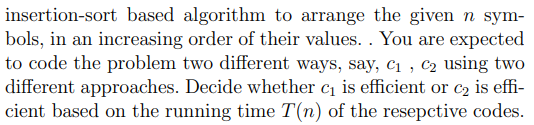
**C2[binary search]**

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For the same inputs, c2 method seems to provide better results than c1 method.

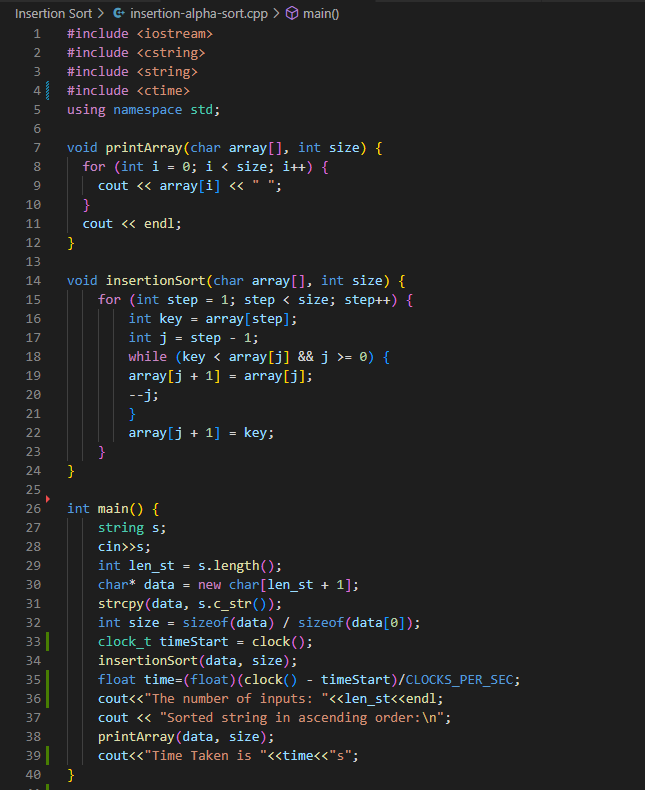
Thus, Binary search method is more efficient in terms of time complexity.

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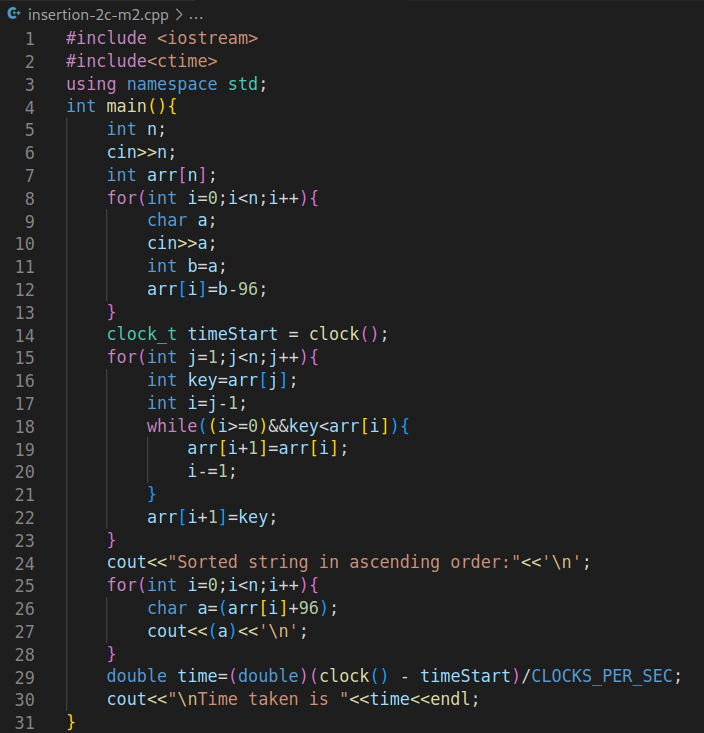
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**CODE**

**Approach c1**

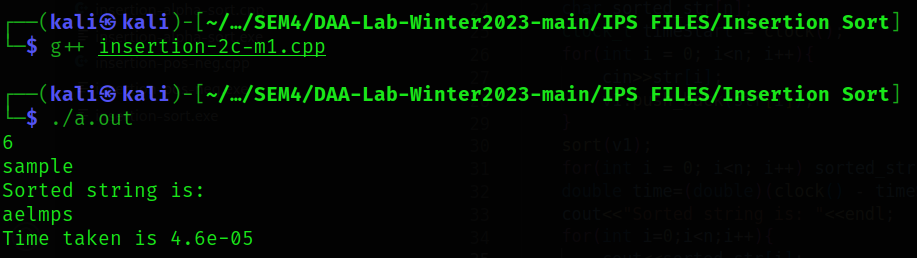
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**Approach c2**

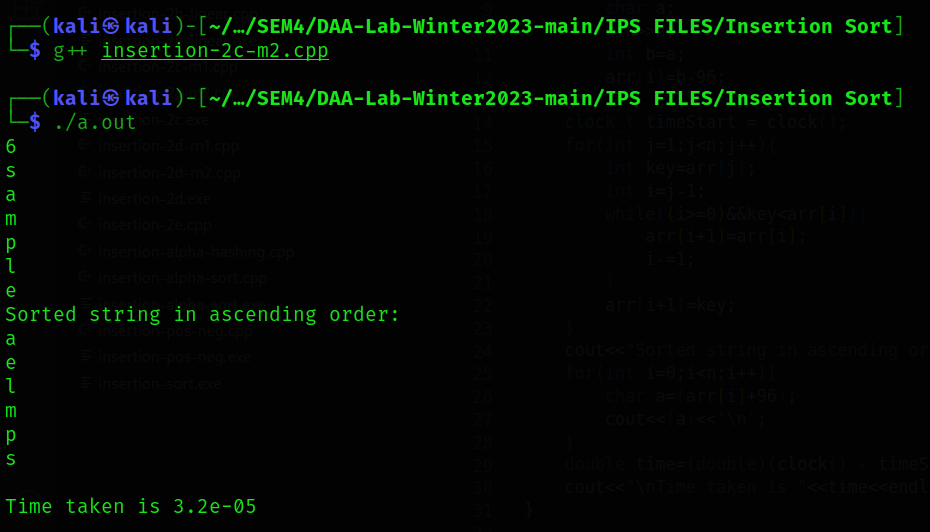
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**OUTPUT:**

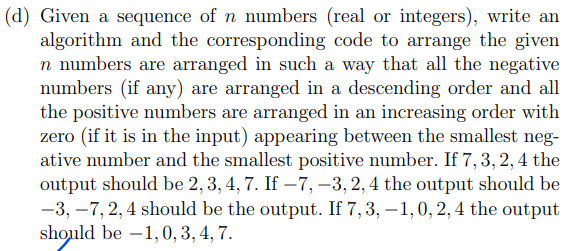
**Approach c1**

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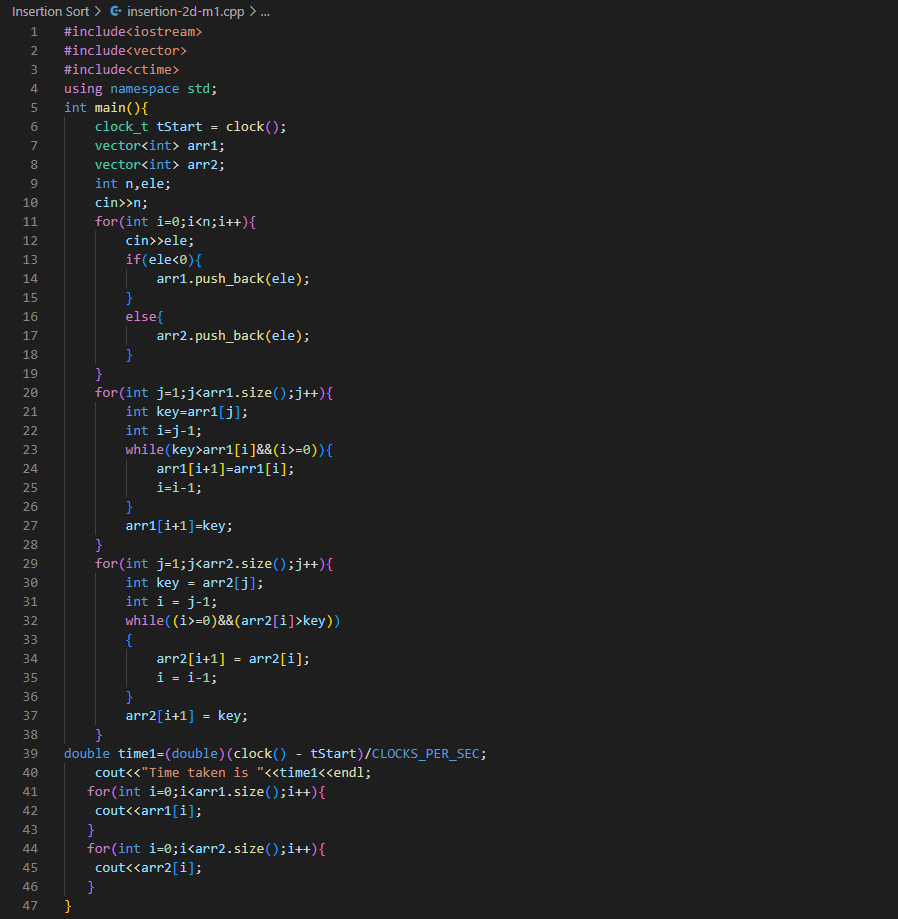
**Approach c2**

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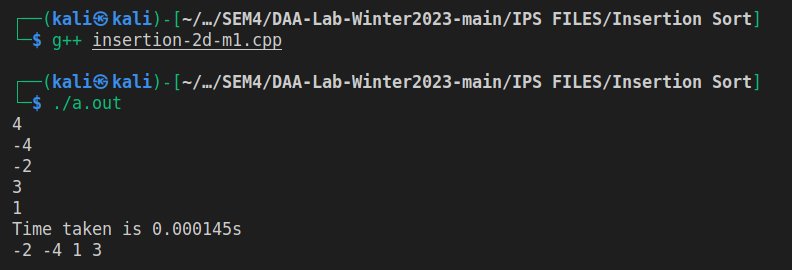
By looking at the time taken by the 2 approaches, I feel that my approach c2 is taking lesser time than approach c1 for the same input. So, approach 2 is more efficient.

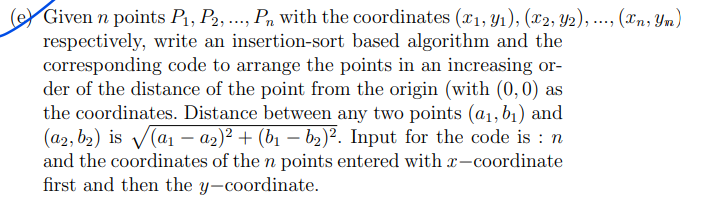
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**CODE**

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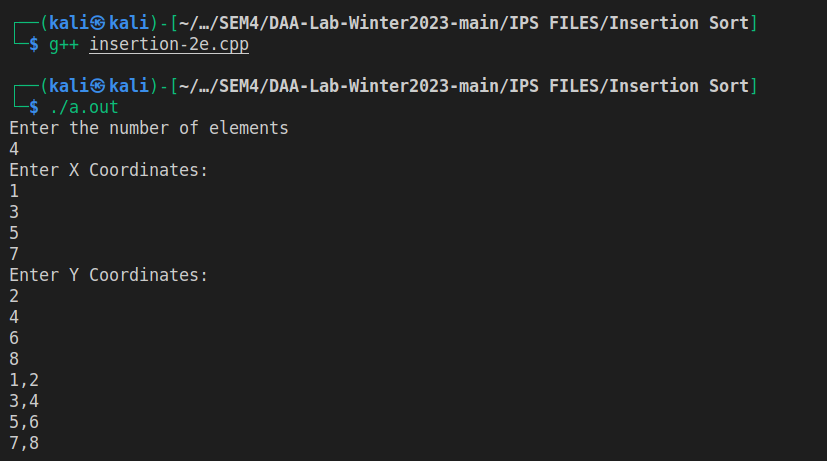
**OUTPUT**

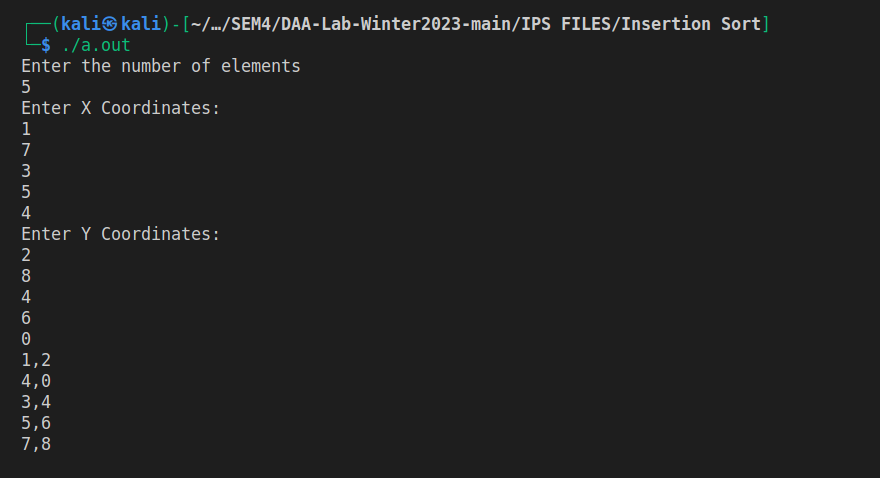
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**OUTPUT**

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