**SVKM’s NMIMS**

**Mukesh Patel School of Technology Management & Engineering**

**Computer Engineering Department**

Program: B.Tech. Sem V

**Course: Design and Analysis of Algorithms**

**List of Experiments**

w.e.f. 1th Jul 2020

**Faculty:** Abhay Kolhe

PART B

|  |  |
| --- | --- |
| Roll No. B032 | Name: Naman Garg |
| Class : B | Batch : B2 |
| Date of Experiment: | Date of Submission |
| Grade : | Time of Submission: |
| Date of Grading: |  |

**B.1 Software Code written by student:**

**B.2 Input and Output:**

**Input Data:**

**Output Data:**

**B.3 Observations and learning:**

**B.4 Conclusion:**

**B.5 Question of Curiosity**

Q.1 Identify the applications of Linear Search Technique.

Q.2 Identify the applications of Binary Search Technique.

Q.3 Comment on the performance of Linear Search and Binary Search Technique, after

filling up the following table.

|  |  |
| --- | --- |
| **Array Size(n)** | **Data** |
| 4 |  |
| 8 |  |
| 16 |  |
| 32 |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Array Size**  **(n)** | **Binary Search** | | | | | | **Linear Search** | | | | | | |
| **Best Case** | | **Avg. Case** | | **Worst Case** | | **Best Case** | | **Avg. Case** | | **Worst Case** | | |
| **Key** | **NoC+** | **Key** | **NoC+** | **Key** | **NoC+** | **Key** | **NoC+** | **Key** | **NoC+** | **Key** | **NoC+** | |
| 4 |  |  |  |  |  |  |  |  |  |  |  | |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  | |  |
| 16 |  |  |  |  |  |  |  |  |  |  |  | |  |
| 32 |  |  |  |  |  |  |  |  |  |  |  | |  |

NoC+  =Number of Comparisons

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