**Name of the student:**

**USN:**

**Div:**

**Roll No:**

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| **Task 1:** Write a program to generate N random numbers between a given range of numbers (P, Q) and write it to a file (*Input.txt*). |
| Code: |
| Output: Put screenshots of the output |

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| **Task 2:** List any 10 sorting algorithms. Describe the operation of each sorting algorithm in few sentences |
| 1.  2.  3.  4.  5.  6.  7.  8.  9.  10. |

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| **Task 3:** Use the file *Input.txt (output of Task1) and implement each of the sorting algorithms (implement all 10 algorithms) – Each of the sorting algorithm can be in a different table* |
| Code: |
| Output: Put screenshots of the output |

**Task 4:**

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|  | **Time complexity** | | |
| **Sorting algorithm** | **Best case** | **Average case** | **Worst case** |
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