National University of Computer and Emerging Sciences



Lab Manual # 06

Programming Fundamental

(CS118)

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| Section | BCS – 1A |
| Semester | Fall 2024 |

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| Problem 1: |  |

Write a program to insert an element into a specific position in a 1D array.

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| Problem 2: |  |

Write a C++ program to find the second smallest elements in a given array of integers.

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| Problem 3: |  |

Write a C++ program to find the most frequent element in an array of integers.

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| Problem 4: |  |

Write a program to reverse the elements of an array. For example, if the array is [1, 2,3, 4, 5], the output should be [5, 4, 3, 2, 1].

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| Problem 5: |  |

Write a C++ program to update every array element by multiplication of the next and previous values of a given array of integers.

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| Problem 6: |  |

Write a C++ program to separate even and odd numbers in an array of integers. Put all even numbers first, and then odd numbers.

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| Problem 7: |  |

Write a program to rotate the array elements to the left by one position. For example, if the array is [1, 2, 3, 4, 5], the output should be [2, 3, 4, 5, 1].

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| Problem 8: |  |

Write a program that check an array is palindrome or not.

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| Problem 9: |  |

Write a program that rotate the given array and check after how many rotations the array will be same and after every rotation pick the last element of array and make a new array and check that the array of last elements and original array is same or not.