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| **COMSATS University Islamabad**  **Sahiwal Campus** | | |
| **Department of computer science** | | |
| **ARRAYS TASK** | | |
| **Subject:** Programming Fundamentals | **Couse code:** CSC103 | **Due date: \_\_\_\_\_\_** |
| **Instructor:** M. Khurram Nisar | **Class:** FA23-BCS-E | **Total marks:** 10 |

Note: You need to develop and run these programs of your own. I may conduct viva/quiz to verify if programs are actually written by you. Failure to show understanding of code, copied tasks and code written using AI tools will yield 0 marks.

1. Write a program that inputs ten integers in an array and count all prime numbers and then display total numbers of primes in arrays.
2. Write a program that input ten integers in an array. It then displays the occurrences of each number in the array as follows:
   * + - 1. 3 is stored 4 times in an array
3. Write a program that uses two arrays to store roll no. and marks of students. It inputs roll numbers and marks of five students and stores them in corresponding elements of the arrays. (For example, if roll number 1 is stored in rno[0] then his marks must be stored in marks[0] and so on.) The program finally displays the roll number and marks of the student with highest marks.
4. Write a program that initializes an array. It inputs a value from the user and searches the number in an Array using linear search.
5. Write a program that initializes an array. It inputs a value from the user and searches the number in an Array using binary search.