# Jagannath International Management School

**VasantKunj, New Delhi – 110070**

(Affiliated to Guru Gobind Singh Indraprastha University, New Delhi)
Recognized u/s 2(f) by UGC & Accredited with 'A' Grade by NAAC
Participant of UNGC & UNPRME, New York
ISO 9001:2015 Quality Certified

**Bachelor of Computer Applications (BCA)**

**Course : BCA** **Semester : I**
**Subject Code: 20171** **Subject : C. Prog Lab**

| S. No. | Question |
|---|---|
| 1. | Write a program to convert temperature from Celsius to Fahrenheit by taking input from the user. |
| 2. | Write a program to find the greatest number among 3 numbers given by the user. |
| 3. | Write a program to check if a given number is a prime number or not. |
| 4. | Write a program to display the following pattern upto N rows, taking the value of N from the user:<br>1<br>2 3<br>4 5 6<br>7 8 9 10 |
| 5. | Write a program to input marks of 50 students using an array and display the average marks of the class. |
| 6. | Write a program to search for a number entered by the user in a given array and display the array in ascending order. |
| 7. | Write a program to check if a string is palindrome or not. |
| 8. | Write a program to add, subtract, multiply and divide two numbers using pointers. |
| 9. | Write a program to create a structure for employees containing the following data members: Employee ID, Employee Name, Age, Address, Department and Salary. Input data for 10 employees and display the details of the employee from the employee ID given by the user. |
| 10. | Write a program to create two files with names EvenFile and OddFile. Input 20 numbers from the user and save even numbers in EvenFile and odd numbers in OddFile. |
| 11. | Write a menu driven program to construct a calculator for following arithmetic operations: addition, subtraction, multiplication, division, average and percentage. |
| 12. | Write a menu driven program to perform the following operations:<br>(i) Print armstrong numbers upto N, (ii) Display prime numbers between 1 to N, (iii) Reverse of an integer |
| 13. | Write a program to convert a hexadecimal number into a binary number. |
| 14. | Write a program to calculate factorial of a number and display fibonacci series upto N terms using recursive functions. |
| 15. | Write a program to perform matrix addition, (ii) matrix multiplication, and (iii) Matrix transpose) on 2D arrays. |
| 16. | Write a program to make use of arrays with structures in the following ways:<br>(i) Use array as a structure data member<br>(ii) Create array of structure variables |

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| 17. | Write a program to compare the contents of two files by taking names of the files through command line arguments. |
| 18. | WAP to perform I/O and make use of file positioning functions on Binary files. (using fseek, ftell, rewind functions) |
| 19. | Write a menu driven program to implement the following string operations:<br>(i) Calculate length of a string<br>(ii) Concatenate at the end of a given<br>(iii) Copy one string to another<br>(iv) Compare contents of two strings<br>(v) Copy nth character string to another |
| 20. | Write a program to read time in string format and extract hours, minutes and second also check time validity |