**BCA I SEM PROGRAM LIST**

**Basic Programs**

|  |  |  |
| --- | --- | --- |
| **S.No** | **PROGRAM** | **PAGE NO.** |
|  | WAP to printyour details |  |
|  | WAP to find the sum and average of two numbers. |  |
|  | WAP to find the area and perimeter of a rectangle. |  |
|  | WAP to find the area and perimeter of a square. |  |
|  | WAP to find the area and circumference of a circle. |  |
|  | WAP to find the area of a right angled triangle. |  |
|  | WAP to swap two numbers using third variable. |  |
|  | WAP to swap two variables without using third variable. |  |
|  | WAP to convert rupees in to paise. |  |
|  | WAP to convert kilometer into meter and centimeter. |  |
|  | WAP to find the sum of first and last digit of a four digit number. |  |
|  | WAP to find the sum of all individual digits of a five digit number. |  |
|  | WAP to convert Celsius into Fahrenheit |  |

**Conditional**

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| --- | --- | --- |
| 14 | WAP to find the greatest number between two numbers. |  |
| 15 | WAP to find the largest of three numbers. |  |
| 16 | WAP to check if entered number is even or odd. |  |
| 17 | WAP to check if entered number is positive or negative. |  |
| 18 | WAP to check whether year is leap year or not. |  |
| 19 | WAP to check if entered number is a perfect square. |  |
| 20 | WAP to find the largest of three umbers using nested if. |  |
| 21 | WAP to print the day using else if ladder. |  |
| 22 | WAP to print day using switch case. |  |
| 23 | WAP to display the number of days in entered month. |  |
| 24 | WAP to find large number of two numbers using conditional operator. |  |
| 25 | WAP to find the large number of three numbers using conditional operator. |  |
| 26 | WAP to find the sum of ‘n’ natural numbers using goto. |  |
| 27 | WAP to find the grade of the given student. |  |

**Looping**

|  |  |  |
| --- | --- | --- |
| 28 | WAP to find the sum of individual digits of a five digit number using while loop. |  |
| 29 | WAP to find the sum of individual digits of a five digit number using do while loop. |  |
| 30 | WAP to find the sum of individual digits of a five digit number using for loop. |  |
| 31 | WAP to find simple interest for five sets. |  |
| 32 | WAP to print the sum of first ‘n’ natural numbers. |  |
| 33 | Demo of break in loop. |  |
| 34 | Demo of continue in loop. |  |
| 35 | WAP to check if the number is Prime. |  |
| 36 | WAP to print all prime numbers between 1 and 300. |  |
| 37 | WAP to print the Fibonacci series up to ‘n’ terms |  |
| 38 | WAP to find the reverse of the entered number. |  |
| 39 | WAP to check if entered number is palindrome or not. |  |
| 40 | WAP to generate all combinations of 1,2& 3. |  |
| 41 | WAP to find ‘x’ raised to the power ‘y’ i.e., xy. |  |
| 42 | WAP to find the sum of the series x+x2+x3+….xn. |  |
| 43 | WAP to find the factorial of entered number. |  |
| 44 | WAP to find the sum of 1/1! + 2/2! + 3/3! +….. n/n! |  |
| 45 | WAP to generate a table of entered number. |  |
| 46 | WAP to find the sum of all even numbers from 2 to 400 without using if. |  |
| 47 | WAP to find the sum of all odd numbers from 1 to 200 without using if. |  |
| 48 | WAP to convert decimal to binary. |  |
| 49 | WAP to convert binary to decimal. |  |
| 50 | WAP to find sum and average of ‘n’ random numbers. |  |
| 51 | WAP to calculate HCF and LCM of given number. |  |
| 52 | WAP to add the even digits and odd digits of a number separately. |  |
| 53 | WAP to print the pattern:  1  2 2  3 3 3  ---------- |  |
| 54 | WAP to print the pattern:  1  1 2  1 2 3  --------  --------- |  |
| 55 | WAP to print the pattern:  ……………  1 2 3 4  1 2 3  1 2  1 |  |
| 56 | WAP to print the pattern:  1  2 1  3 2 1  …………  ……………… |  |
| 57 | WAP to print Pascal’s triangle:  1  1 2 1  1 3 3 1  ------------------  ------------------------------ |  |

**Array**

|  |  |  |
| --- | --- | --- |
| 58 | WAP to find sum and average of ‘n’ numbers using 1D array. |  |
| 59 | WAP to find even numbers among ‘n’ numbers. |  |
| 60 | WAP to find reverse of 1D array. |  |
| 61 | WAP to find the largest number and smallest number among ‘n’ numbers. |  |
| 62 | WAP to sum of even numbers and odd numbers among ‘n’ numbers. |  |
| 63 | WAP to insert an element in exiting 1d array at specific position |  |
|  | WAP to delete an element in exiting 1d array at specific position |  |
| 64 | WAP to enter and display a matrix. |  |
| 65 | WAP to find sum of all elements of a matrix. |  |
| 66 | WAP to find the transpose of a square matrix. |  |
| 67 | WAP to check if the square matrix is symmetric or not. |  |
| 68 | WAP to multiply two matrices. |  |
| 69 | WAP to addition of two matrices. |  |
| 70 | WAP to sum of both diagonal elements of a matrix. |  |
| 71 | WAP to find row wise and column wise sum of elements of a matrix. |  |

**Functions**

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| 72 | WAP to find the sum and average of two numbers. Using user defined function with no arguments and no return |  |
| 73 | WAP to find the area and perimeter of a rectangle Using user defined function with arguments and no return |  |
| 74 | WAP to find the area and perimeter of a square Using user defined function with arguments and with return |  |
| 75 | WAP to find the area and circumference of a circle Using user defined function with no arguments and no return |  |
| 76 | WAP to find the area of a right angled triangle Using user defined function with arguments and no return |  |
| 77 | WAP to swap two numbers . Using user defined function with arguments and no return |  |
| 78 | WAP to convert rupees in to paise. Using user defined function with arguments and with return |  |
| 79 | WAP to convert kilometer into meter and centimeter. Using user defined function with no arguments and no return |  |
| 80 | WAP to find the sum of first and last digit of a four digit number. Using user defined function with arguments and no return |  |
| 81 | WAP to find the sum of all individual digits of a five digit number. Using user defined function with arguments and with return |  |
| 82 | WAP to convert Celsius into Fahrenheit Using user defined function with no arguments and no return |  |
| 83 | WAP to find the greatest number between two numbers. Using user defined function with no arguments and with no return |  |
| 84 | WAP to find the largest of three numbers. Using user defined function with arguments and with return |  |
| 85 | WAP to check if entered number is even or odd. Using user defined function with arguments and with no return |  |
| 86 | WAP to check if entered number is positive or negative. Using user defined function with arguments and with return |  |
| 87 | WAP to check whether year is leap year or not. Using user defined function with arguments and with return |  |
| 88 | WAP to check if entered number is a perfect square. Using user defined function with arguments and with return |  |
| 89 | WAP to find the sum of individual digits of a five digit number Using user defined function with no arguments and with no return |  |
| 90 | WAP to find simple interest for five sets. Using user defined function with arguments and with no return |  |
| 91 | WAP to print the sum of first ‘n’ natural numbers. Using user defined function with arguments and with return |  |
| 92 | WAP to check if the number is Prime. Using user defined function with arguments and with return |  |
| 93 | WAP to print all prime numbers between 1 and 300. Using user defined function with no arguments and with no return |  |
| 94 | WAP to print the Fibonacci series up to ‘n’ terms Using user defined function with arguments and with no return |  |
| 95 | WAP to find the reverse of the entered number. Using user defined function with arguments and with return |  |
| 96 | WAP to check if entered number is palindrome or not. Using user defined function with arguments and with return |  |
| 97 | WAP to generate all combinations of 1,2& 3. Using user defined function with no arguments and with no return |  |
| 98 | WAP to find ‘x’ raised to the power ‘y’ i.e., xy. Using user defined function with arguments and with return |  |
| 99 | WAP to find the sum of the series x+x2+x3+….xn. Using user defined function with arguments and with return |  |
| 100 | WAP to find the factorial of entered number. Using user defined function with no arguments and with no return |  |
| 101 | WAP to find the sum of 1/1! + 2/2! + 3/3! +….. n/n! Using user defined function with arguments and with no return |  |
| 102 | WAP to generate a table of entered number. Using user defined function with no arguments and with no return |  |
| 103 | WAP to find the factorial of a number using recursion |  |
| 104 | WAP to find x to the power y using recursion |  |
| 105 | WAP to print Fibonacci series up to n terms using recursion |  |
|  | **POINTER** |  |
| 106 | WAP to illustration working of pointer |  |
| 107 | WAP to swap the values of two variable using call by value |  |
| 108 | WAP to swap the values of two variable using call by reference |  |
| 109 | WAP to find sum and average of ‘n’ numbers using 1D array using malloc() |  |
| 110 | WAP to find even numbers among ‘n’ numbers using calloc() |  |
| 111 | WAP to find reverse of 1D array using malloc() |  |
| 112 | WAP to find the largest number and smallest number among ‘n’ numbers using calloc() |  |
| 113 | WAP to sum of even numbers and odd numbers among ‘n’ numbers using malloc() |  |
| 114 | WAP to insert an element in exiting 1d array at specific position using calloc() |  |
| 115 | WAP to delete an element in exiting 1d array at specific position using malloc() |  |
|  |  |  |
|  | **1D ARRAY WITH USER DEFINED FUNCTION** |  |
| 116 | WAP to find sum and average of ‘n’ numbers using 1D array. |  |
| 117 | WAP to find even numbers among ‘n’ numbers. |  |
| 118 | WAP to find reverse of 1D array. |  |
| 119 | WAP to find the largest number and smallest number among ‘n’ numbers. |  |
| 120 | WAP to sum of even numbers and odd numbers among ‘n’ numbers. |  |
| 121 | WAP to insert an element in exiting 1d array at specific position |  |
| 122 | WAP to delete an element in exiting 1d array at specific position |  |
|  | **STRUCTURE** |  |
| 123 | WAP to read an employee record and print it |  |
| 124 | WAP to read n employees record and print their record |  |
| 125 | WAP to read a student record with 5 subject’s marks as array and print his performance |  |
| 126 | WAP to read n students record with 5 subject’s marks as array and print their performance |  |
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