Lab Assignment-15: User Defined Function

Q#	Experiment Details	Input	Output
1.	WAP to add two numbers entered through the keyboard by using a suitable user defined function.	**Set 1:** Enter two number: 17 10 **Set 2:** Enter two number: 5 -12	**Set 1:** Sum of 17 and 10 = 27 **Set 2:** Sum of 5 and -12 = -7
2.	WAP to find the factorial of a number n by using a suitable user defined function.	**Set 1:** Enter a number: 5 **Set 2:** Enter a number: 0	**Set 1:** Factorial of 5 = 120 **Set 2:** Factorial of 0 = 1
3.	A Fibonacci sequence is defined as follows: the first and second terms in the sequence are 0 and 1. Subsequent terms are found by adding the preceding two terms in the sequence ($F_i = F_{i-1} + F_{i-2}$). WAP to find out the value of nth term of the Fibonacci sequence by writing a suitable user defined function.	**Set 1:** Enter Fibonacci term serial number: 2 **Set 2:** Enter Fibonacci term serial number: 8	**Set 1:** Fibonacci term serial number: 2 Fibonacci number: 1 **Set 2:** Fibonacci term serial number: 8 Fibonacci number: 13
4	Write a C program to determine a number is prime or not using a function named as "PRIME".	**Set 1:** Enter an integer: 7 **Set 2:** Enter an integer: 6	**Set 1:** 7 is prime. **Set 2:** 6 is not prime.
5	Write a C program to perform swapping of two integers using a function SWAP.	**Set 1:** Enter num1: 10 Enter num2: 20 **Set 2:** Enter num1: 15 Enter num2: 30	**Set 1:** Before Swapping num1=10 num2=20 After Swapping num1=20 num2=10 **Set 2:** Before Swapping num1=15 num2=30

			After Swapping num1=30 num2=15

Home Assignments (Practice Problems)

Q#	Experiment Details	Input	Output
1.	WAP to test whether a number entered through the keyboard is a number in the Fibonacci sequence or not. (Using function)	**Set 1:** Enter the number to test whether it is in Fibonacci sequence or not: 10 **Set 2:** Enter the number to test whether it is in Fibonacci sequence or not: 8	**Set 1:** Entered number: 10 Number is in Fibonacci sequence: No **Set 2:** Entered number: 8 Number is in Fibonacci sequence: Yes
2.	WAP by using user defined function to calculate the sum of the digits of any given integer.	**Set 1:** Enter a number: 589 **Set 2:** Enter a number: 25	**Set 1:** Sum of the digits is 22 **Set 2:** Sum of the digits is 7
3	WAP to print all prime numbers between 1 to 100 using function.		**Prime numbers between 1 to 100:** 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97
4.	Write a function that will return the counting of Zeros in a Positive Integer	**Set 1:** Input: 110560 **Set 2:** Input: 178655	**Set 1:** No of zeros: 2 **Set 2:** No of zeros: 0
5.	WAP to test whether a number n is palindrome number or not.	**Set 1:** Enter a number to test for palindrome: 123 **Set 2:** Enter a number to test for palindrome: 1551	**Set 1:** Entered number: 123 Number is not palindrome. **Set 2:** Enter a number to test for palindrome: 1551 Number is palindrome.