

GUJARAT TECHNOLOGICAL UNIVERSITY

MASTERS IN COMPUTER APPLICATION

Year – I (Semester – I) (W.E.F. JULY 2017)

Subject Name: Fundamentals of Programming – I

Subject Name: 3610001

Practical List

1	Write a Program to Print “Hello World!”
2	Write a program to print Name , Address and Birth Date.
3	Write a program to add, multiply and divide two integers and float numbers.
4	Write a program to convert Rupees(float) to paisa(int).
5	Write a Program to swap two numbers using temporary variable.
6	Write a Program to swap two numbers without temporary variable.
7	Write a Program to check whether given Number is an odd or Even Number
8	Write a Program to find maximum number from user entered 3 numbers.
9	Write a Program to Implement Simple Calculator operation on given two input integers.
10	Write a Program to check whether given Number is a Prime Number or not?
11	Write a Program to check whether given Number is a Perfect Number or Not?
12	Write a Program to implement Number system conversion Create Menu 1 Decimal to Binary 2 Decimal to Octal 3 Decimal to Hexa 4 Exit
13	Write a program to convert octal to binary number.
14	Write a Program to display series 1 4 9 16 ...n (using all looping controls)
15	Write a Program to display multiplication table for given number.
16	Write a Program to find first N Fibonacci numbers.
17	Write a Program to find Factorial for given Number
18	Write a Program to convert from Fahrenheit to centigrade. (The formula for conversion: $C = (5/9) * (F - 32)$)
19	Write a program to print the digit pyramid (reverse) of n lines as shown below. Example is for n=5. <div style="text-align: center;"> 123454321 1234321 12321 121 1 </div>
20	Write a program to find sum of first N odd numbers
21	Write a program to find first N prime numbers
22	Write a program to perform addition and subtraction on mXn matrix.
23	Write a program to. Write a function that calculates the sum and average of the array sent as an argument.

24	Write a program to add two matrices.
25	Write a program to find string length
26	Write a program that sorts the array sent as an argument. Provide menu to sort array in ascending and descending.
27	Write a program that reads and merges two sorted arrays to give a single sorted array.
28	Write a program that takes few array elements from user and then displays the menu to find smallest, largest, average and summation of all the numbers.
29	Write a program to update and delete an element at a desired position in an array.
30	Write a program to print size of int, float, double variable
31	Write a program that will read a text and count all occurrences of a particular Word
32	Write a program that appends the one string to another string
33	Write a program to reverse a given String (one word) and find frequency of Characters found in it.
34	Write a program that finds a given word in a string.
35	Write a function prime that returns 1 if its argument is a prime no. and returns 0 Otherwise
36	A number is special if it is divisible by 15. A number is big if it is greater than 999. A number is weird if it is divisible by 5 and 6 but not 18. A number is scary if it is big or weird. Write a program to check which of the numbers 450, 540, 600 and 675 are special but not scary.
37	Write a C program to read a three-digit number, and produce the following output (assuming that the input is 347). 3 hundreds 4 tens 7 units
38	Write a Program to find sum of digits of 3-digit number.
39	Write a program to reverse given number and check whether it is a Palindrome or not?
40	Write a program to reverse given String and check whether it is a Palindrome or not?
41	Write a program to count number of spaces, comma, lines, words and characters in a given string.
42	Write a program to count number of vowels in a given string.
43	Write a program to print all digits of an integer number into words. Use an array of 10 strings to store 10 digits in words. Ex. For input 1985, output should be One Nine Eight Five.
44	Write a program that accepts Name, Department, basic, HRA, and conveyance from the user and calculates total salary. Print salary slip. DA = 35% of Basic Deductions: Medical : Rs. 150 , PF: 10% of Basic+DA, IT : 20%
45	Write an algorithm to accept string (one word) from user and display triangle. e.g. INDIA will display Triangle as below I IN IND INDI INDIA

Note: Implement Practical#20 onwards using functions and different types of calling parameters (if any).