

Programs for Simple Programming Logic Practice(Using Control Structures) (C/C++/Java/C#)

Section 1: If & Switch

- 1) Write a program to print the product of two given numbers
- 2) Write a program to print the average of the three given numbers
- 3) Write a program to check the given number for even or odd
- 4) Write a program to check the given number for the divisibility of 3 & 4.
- 5) Write a program to convert the given centigrade temperature to foreign heat
- 6) Write a program to read three positive numbers and print the min, max and average of the given.
- 7) Write a program to read the month in integer and print the month name. Print "Invalid month" message if invalid number is given.

Section 2: while & do..while loop

- 8) Write a program to print 1 to 10 numbers
- 9) Write a program to print alphabets in lowercase from 'a' to 'z'.
- 10) Write a program to print alternative numbers from 50 to 100.
- 11) Write a program to print 3 divisible numbers between 1 and 50.
- 12) Write a program to print alternate 7 divisible numbers between 50 and 100.
- 13) Write a program to print first 5 alternate 7 divisible numbers after 100.
- 14) Write a program to print the sum of every fourth integer, beginning with 5 for all values less than 100.
- 15) Write a program to print the sum of all 6 divisible numbers between 1 and 50.
- 16) Write a program to print the sum of squares of first 5 three divisible numbers from 100.

- 17) Write a program to print the sum of alternate 7 divisible numbers between 1 and 50.
- 18) Write a program to print the numbers from 1 to 100 with five values per line, two blank spaces between values.
- 19) Write a program to print the conversion table to change the temperature in centigrade(C) to temperature in Fahrenheit (F) for all temperatures between 28C to 50C. Use the formula $F = (9/5) C + 32$.
- 20) Write a program to read in a series of numbers and print each number with its square and its cube.
- 21) Write a program to read in a series of positive and negative numbers and print each number with its square and its square root.
- 22) Write a program to read in a series of numbers, each of which can contain decimal places. Print each number as it is read in. Determine whether each number is +ve, -ve or zero, and print "positive", "negative" or "zero" next to it. At the end print how many numbers are positive, negative and zero.
- 23) Write a program to reverse the given number
- 24) Write a program to check the given number for palindrome number
- 25) Write a program to check the given number for Armstrong number
- 26) Write a program to print all palindrome numbers between 100 and 200.
- 27) Write a program to print first 5 Armstrong numbers after 100.
- 28) Write a program to check the given number for prime number.
- 29) Write a program to print sum of all prime numbers between 1 and 25.
- 30) Write a program to print alternative prime numbers between 1 and 100 in reverse direction.
- 31) Write a program to read series of numbers and print all prime, Armstrong and palindrome numbers.
- 32) Write a program to print the binary equivalent for the given decimal number
- 33) Write a program to print the decimal equivalent for the given binary number
- 34) Write a program to print the hexadecimal equivalent for the given decimal number

Section 3: For loop

- 35) Write a program to find out the factorial of the given number
- 36) Write a program to print the table for the given number from 1 to 20.
- 37) Write a program to check the given number for Fibonacci number
- 38) Write a program to print the Fibonacci series for the given number of terms.
- 39) Write a program to print the sum of given numbers through command line.
- 40) Write a program to print the alphabets from A-Z in reverse.

Section 4: Nested loops

- 41) Write a program to print rectangle of '*' for the give no of lines.
- 42) Write a program to print the multiplication table that covers the numbers from 1 to 10.
- 43) Write a program to print the half pyramid of '\$' for the given number of lines
- 44) Write a program to print the pyramid of '\$' for the given number of lines
- 45) Write a program to print the diamond 'K' for the given number of lines.
- 46) Write a program that initializes two 3*3 integer matrices and displays the sum of both.
- 47) Write a program that initialized two 3*3 integer matrices and displays the product of both

Section 5: Recursion

- 48) Write a program to find out the factorial of a given number using recursion.
- 49) Write a program to find out the given number for Fibonacci number using recursion logic
- 50) Write a program to display the the sum of Fibonacci numbers for the given number of terms.