



MIRACLE SOFTWARE SYSTEMS, INC.

Exercises

1. Program to take the number at runtime and check whether the given number is positive or negative.
2. Check whether the given number is even or odd.
3. Check whether the year is Leap year or not.
4. Check whether the given number is divisible by both 3 and 5.
5. Check whether the student is passed or failed and if he got passed print which rank obtained.
6. Check given character upper case or lower case or digit or special character?
7. Check given co-ordinate lies on origin or x-axis y-axis?
8. Print which number is biggest among two numbers?
9. Compare two numbers using ternary operators
10. Print biggest among three numbers using ternary operators.
11. Print which digit is entered. Print which character is entered.
12. Simple Menu Driven Calculator
13. Print number of days in a given month.
14. Print multiplication table for a given number
15. Print square of each number up to 20
16. Print "n" Even numbers
17. Print sum of all even numbers b/w 1 to n
18. Print even numbers up to n using
 - a. For
 - b. while
 - c. Do-while
19. Program to print the prime numbers from 1 to 10.
20. Print square of each number upto 20.
21. Print Sum of $1/1 + 1/2 + 1/3 + \dots + 1/n$.
22. Print Sum of $1/1 + 1/2 + 1/2^2 + \dots + 1/2^n$.
23. Print series $1 + x/1! + x^2/2! + x^3/3! + \dots + x^n/n!$
24. Print factorial of n.
25. print number of digits in a number
26. Print characters from a to z
27. Given number is perfect number or not
28. Validate the users input to be in the range 1-10.

29. Spell the number in form of words related to digits.
30. Check whether the number is Palindrome or not.
31. Demo of Fibonacci series.
32. Demo of using Do-while loop to print multiplication table for a given number.
33. Print the Fibonacci series up to n.
34. Find big digit in a number
35. Write a program to Read an integer value for variable name YourSalary using input statement.
Display the content of YourSalary
36. Write a program to Read a character value for variable name YourFirstInitial using input statement.
Display the content of YourFirstInitial
37. Write a program to convert the Time in hours to its seconds Equivalent ($\text{seconds} = 3600 * \text{hours}$)
38. Write a program to compute number of hours from seconds. use the word const to define the constant SECONDS_PER_HOUR ($\text{hours} = \text{seconds} / \text{SECONDS_PER_HOUR}$)
39. Write a program that determines whether a number supplied by the user is prime or not
40. Write a program to read in 10 numbers and compute the average, maximum and minimum values.
41. Program to print the no of occurrences of a digit in a number.
42. Program to whether all digits in a given number are equal or not?
43. Program to print multiplication tables from 1 to 10 upto 12.
44. Program to add the numbers 1 through n, and then prints the result (which should be less than 50).
45. Program to generate N prime numbers
46. Which integer between 1 and 10000 has the largest number of divisors, and how many divisors does it have? Write a program to print out the results. It is possible that several integers in this range have the same, maximum number of divisors. Your program only has to print out one of them.
47. Program to print the sum of alternative digits in a given number?
48. Program to add the first and last digit of given number?
49. Program to print
 - a.

```
      1
     1 2 1
    1 3 3 1
   1 4 6 4 1
```
 - b.

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      1
     2 1 2
    3 2 1 2 3
   4 3 2 1 2 3 4
```
50. Program to check whether a number is
 - a. Armstrong or not
 - b. Perfect or not