

C Programming Exercises

Hemanth Kumar Desineedi and GVV Sharma*

1 BASICS

Problem 1. Write a C program to find if a given number is even or not using *if-else*.

Problem 2. Repeat problem 1 using *switch-case* statements.

Problem 3. Write a C program to find all even numbers between any two numbers using a *for loop*.

Problem 4. Repeat problem 3 using a *while loop*.

Problem 5. Repeat problem 3 using a *do-while loop*.

Problem 6. Write a *function* to find if a given number is even or not.

2 CALCULATOR

Problem 7. Write a function to add two numbers.

Problem 8. Write a function to add subtract numbers.

Problem 9. Write a function to multiply two numbers.

Problem 10. Write a function to divide two numbers.

Problem 11. Write a function to find the square root of a number.

Problem 12. Write a function to find the square of a number.

Problem 13. Write a function to convert percentage to decimal.

3 INTEGER TRIANGLES

Problem 14. Given the perimeter of a triangle (it should be an integer) write a program to find all the possible triangles with integer sides. You just have to print the lengths of the sides of each such triangle.

Problem 15. Create a GUI applicaiton in Python for the previous problem.

*The authors are with the Department of Electrical Engineering, Indian Institute of Technology, Hyderabad 502285 India e-mail: {ee16mtech11008, gadepall}@iith.ac.in. All content in this manual is released under GNU GPL. Free and open source.