13.Write a program that uses a function mul(int,int) to determined the second integer is a multiple of the first integer. The function takes two integers argument and return 1 if the second integer is a multiple if first and 0 otherwise. The program should input a series of pairs of integers.

Coding:

#include <iostream>

// Function declaration

int mul(int a, int b);

int main() {

int num1, num2;

char continueInput;

do {

// Input two integers from the user

std::cout << "Enter the first integer: ";

std::cin >> num1;

std::cout << "Enter the second integer: ";

std::cin >> num2;

// Call the function to check if the second integer is a multiple of the first

if (mul(num1, num2)) {

std::cout << num2 << " is a multiple of " << num1 << "." << std::endl;

} else {

std::cout << num2 << " is not a multiple of " << num1 << "." << std::endl;

}

// Ask user if they want to continue

std::cout << "Do you want to check another pair? (y/n): ";

std::cin >> continueInput;

} while (continueInput == 'y' || continueInput == 'Y');

return 0;

}

// Function definition

int mul(int a, int b) {

// Return 1 if b is a multiple of a, otherwise return 0

if (a != 0 && b % a == 0) {

return 1;

}

return 0;

}

