6.Write a program to check whether a number is prime number, even or odd number using function.

Coding:

#include <iostream>

// Function declarations

bool isPrime(int number);

bool isEven(int number);

bool isOdd(int number);

int main() {

int num;

// Input a number from the user

std::cout << “Enter a number: “;

std::cin >> num;

// Check and display whether the number is prime, even, or odd

if (isPrime(num)) {

std::cout << num << “ is a prime number.” << std::endl;

} else {

std::cout << num << “ is not a prime number.” << std::endl;

}

if (isEven(num)) {

std::cout << num << “ is an even number.” << std::endl;

} else {

std::cout << num << “ is an odd number.” << std::endl;

}

return 0;

}

// Function to check if a number is prime

bool isPrime(int number) {

if (number <= 1) return false;

for (int i = 2; i \* i <= number; ++i) {

if (number % i == 0) return false;

}

return true;

}

// Function to check if a number is even

bool isEven(int number) {

return number % 2 == 0;

}

// Function to check if a number is odd

bool isOdd(int number) {

return number % 2 != 0;

}

