using System;

public interface IMailSender

{

bool SendMail(string toAddress, string message);

}

public class MailSender : IMailSender

{

public bool SendMail(string toAddress, string message)

{

Console.WriteLine($"[Real] Sending email to: {toAddress} with message: {message}");

return true;

}

}

public class CustomerComm

{

private IMailSender \_mailSender;

public CustomerComm(IMailSender mailSender)

{

\_mailSender = mailSender;

}

public bool SendMailToCustomer()

{

string email = "cust123@abc.com";

string message = "Some Message";

return \_mailSender.SendMail(email, message);

}

}

public class MockMailSender : IMailSender

{

public bool WasCalled = false;

public bool SendMail(string toAddress, string message)

{

WasCalled = true;

Console.WriteLine("[Mock] SendMail called with:");

Console.WriteLine($"To: {toAddress}");

Console.WriteLine($"Message: {message}");

return true;}}

public class Program

{

public static void Main()

{

var mockMailSender = new MockMailSender();

var customerComm = new CustomerComm(mockMailSender);

bool result = customerComm.SendMailToCustomer();

if (result && mockMailSender.WasCalled)

{

Console.WriteLine("Test Passed: SendMailToCustomer returned true and SendMail was called.");

}

else

{

Console.WriteLine("Test Failed.");

}

}

}

