**Câu 1**: Thuật toán viết theo Console C#

static void Main(string[] args)

{

int socantim = 0 , tong = 0;

int[] array = { 1, 2, 6, 4, 5, 7, 8, 9, 10 };

socantim = Timsobimat(array, tong);

Console.WriteLine("Missing number is: {0}", socantim);

}

static int Timsobimat(int[] array, int tong)

{

tong = (array.Length + 1) \* (array.Length + 2) / 2;

foreach (int item in array)

{

tong = tong - item;

}

return tong;

}

**Câu 2**: Refactor code

public void Register(UserModel user)

{

try

{

Validation(user);

MailMessage message = new MailMessage();

message.To.Add(user.Email);

message.Subject = "Register";

message.From = new System.Net.Mail.MailAddress("admin@hotmail.com");

message.Body = "Thank you for your register";

SmtpClient smtp = new SmtpClient();

smtp.Host = "smtp.gmail.com";

smtp.Send(message);

}

catch (Exception)

{

}

}

private void Validation(UserModel user)

{

bool validate = true, isExisted = false;

string errorMessage = "";

var existedUser = \_userService.GetUserByUsername(user.Username);

#region Username and Email Handler

if (String.IsNullOrEmpty(user.UserName))

{

errorMessage += "You must specify a username.";

validate = false;

}

if (String.IsNullOrEmpty(user.Email))

{

errorMessage += "You must specify an email address.";

validate = false;

}

else if (!Regex.IsMatch(user.Email, @"^[A-Z0-9.\_%+-]+@[A-Z0-9.-]+\.[A-Z]{2,6}$.", RegexOptions.IgnoreCase))

{

errorMessage += "You must specify a valid email address.";

validate = false;

}

#endregion

#region Check existed user

if (existedUser != null)

isExisted = true;

else

isExisted = false;

if (isExisted)

errorMessage += "User with that username and/or email already exists.";

#endregion

#region Verify password

if (user.Password == null || user.Password.Length < 6)

errorMessage += "You must specify a password of {0} or more characters.";

if (!String.Equals(user.Password, user.ConfirmPassword, StringComparison.Ordinal))

errorMessage += "The new password and confirmation password do not match.";

#endregion

if (validate)

{

Regex RgxUrl = new Regex("[^a-z0-9]");

var isContainsSpecialCharacters = RgxUrl.IsMatch(user.Username);

if (!isContainsSpecialCharacters)

\_userService.SaveUser(user);

}

}

**Câu 3**: SQL Server query sẽ là:

SELECT p.[Name],

od.[Quality],

o.\*

FROM OrderDetail od

INNER JOIN Product p

on p.Id = od.ProductId

INNER JOIN Order o

on o.Id = od.Id