

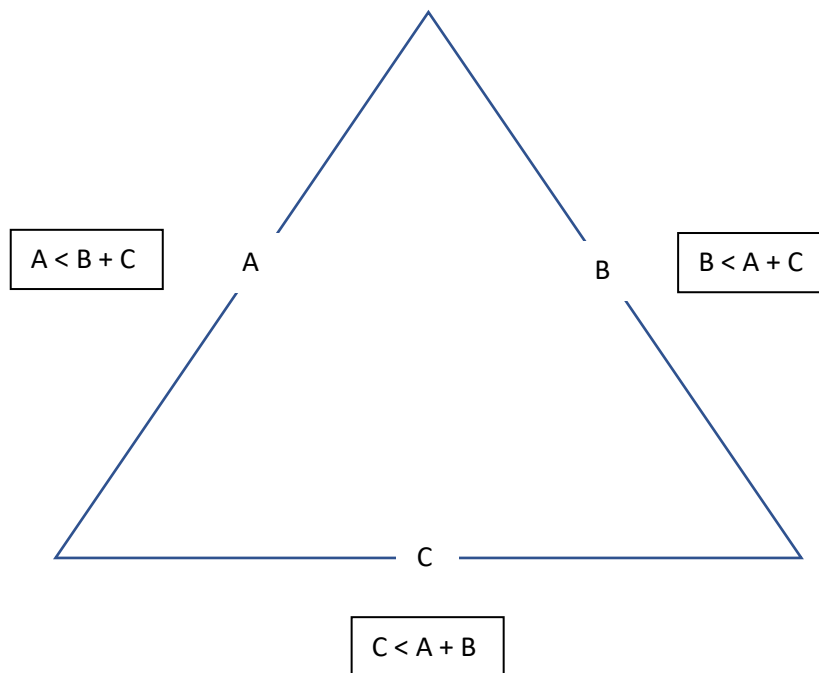
## Basic Coding Knowledge – Fizz Buzz

Write a program that prints the numbers from 1 to 100.

But for multiples of three output “Fizz” instead of the number and for the multiples of five output “Buzz”.

For numbers which are multiples of both three and five output “FizzBuzz”.

Is a triangle valid?



Requirements:

An app that clearly states what it does (checks if the lengths are would form a valid triangle) and how to use the app.

Use the above information to check if what they enter is valid or not (all side lengths will be less than the combined length of the other 2 sides).

Your choice of how it is written, designed, and run.

## SQL Altering

Take this query:

```
SELECT top 10
    c.Id,
    c.IncId,
    c.Name,
    c.AddressLine1,
    c.AddressLine2,
    c.Area,
    c.Postcode,
    c.Balance,
    c.EstimatedDiscount,
    c.Balance + c.EstimatedDiscount AS TotalToPay,
    c.Nature,
    COUNT(DISTINCT tm.TeamMemberId) AS TeamMembers,
    COUNT(DISTINCT ad.Id) AS active_adverts,
    c.RegistrationDate,
    c.EstimatedDiscount,
    c.IsEnabled
FROM Companies c
LEFT JOIN TeamMembers tm ON tm.CompanyId = c.Id
LEFT JOIN BusinessUnits bu ON bu.CompanyId = c.Id
LEFT JOIN AdvertData ad ON ad.BusinessUnitId = bu.Id AND ad.CurrentStatus = 2
LEFT JOIN AdvertAdvancedSearchData aasd ON aasd.AdvertId = ad.AdvertId AND
aasd.ExpiryDate > GETDATE()
GROUP BY
    c.Id,
    c.IncId,
    c.Name,
    c.AddressLine1,
    c.AddressLine2,
    c.Area,
    c.Postcode,
    c.Nature,
    c.IsEnabled,
    c.RegistrationDate,
    c.Balance,
    c.EstimatedDiscount,
    c.IsEnabled
ORDER BY c.Name
```

There are two fields that need to be added to the query that are both in the Companies table:

```
MonthlyClicks
MonthlyApplications
```

Alter the query above to add these fields to the query

## **Laravel Test - Create an Admin panel to manage companies**

Basically, create a project to manage companies and their employees. Mini-CRM.

Basic Laravel Auth: ability to log in as administrator

Use database seeds to create first user with email admin@admin.com and password "password"

CRUD functionality (Create / Read / Update / Delete) for two menu items: Companies and Employees.

Companies DB table consists of these fields: Name (required), email, logo (minimum 100×100), website

Employees DB table consists of these fields: First name (required), last name (required), Company (foreign key to Companies), email, phone

Use database migrations to create those schemas above

Store companies logos in storage/app/public folder and make them accessible from public

Use basic Laravel resource controllers with default methods – index, create, store etc.

Use Laravel's validation function, using Request classes

Use Laravel's pagination for showing Companies/Employees list, 10 entries per page

Use Laravel make:auth as default Bootstrap-based design theme, but remove ability to register