# What are the four pillars of Object-Oriented Programming? Explain each pillar.

#### 1.Abstraction

Abstraction is an essential function of object-oriented programming in C++. Abstraction means displaying only basic information and hiding the details. Data abstraction refers to providing only necessary information about the data to the outside world, hiding the background info or implementation.

## 2. Encapsulation

Encapsulation is defined as wrapping up of data and information under a single unit. In object-oriented programming.

Using Encapsulation also hides the data. In the previous example, the data of any of the sections like sales, finance, or accounts are hidden from any other area.

### 3. Inheritance

Inheritance is the process in which two classes have a relationship with each other. Objects of one class acquire properties and features of the other class.

## 4. Polymorphism

Polymorphism means having many forms. Polymorphism can take more than one form. It is a feature that provides a function or an operator with more than one definition. It can be implemented using function overloading, operator overload, function overriding, virtual function.

I found useful information to help do the research. Link below https://www.freecodecamp.org/news/four-pillars-of-object-oriented-programming/