1. What is OOP?

* OOP is Object Oriented Programming.
* OOP concept not allow data to flow all around the programme. It treats Data as a critical element of the program.
* OOP are used to remove the flaws of POP.
* The core concepts of OOP are:
* Classes and Objects: Classes are blueprint or template of objects while objects are instance of classes created at runtime.
* Encapsulation: The practice of keeping the internal state of an object hidden from the outside world, and only allowing access to it through a defined set of methods.
* Inheritance: The ability for one class to inherit properties and methods from a parent class. This allows for code reuse and a clear class hierarchy.
* Polymorphism: The ability for a single function or method to operate on multiple types of data. This allows for flexibility and code reuse.
* Abstraction: The process of reducing complex systems to simpler interfaces that hide implementation details. This allows for code to be more modular and easier to maintain.