Code  
1. Simplicity  
2. Reusability  
3. Extensibility  
4. Maintainability

OOPs-> Object Oriented Programming Language

1. Abstraction  
2. Encapsulation  
3. Polymorphism  
4. Inheritance

1. Abstraction or data Hiding-> to Showed/Hidden

Class->  
Methods  
Varibales  
Properties

Access modifiers->  
public -> No boudaries or no restrictions-> Open to all   
private-> Is within the code snippet where it is declared  
internal -> Scope is limited to Project or Assembly where it is declared  
protected -> Scope is limited to Base class and also to its derived class  
Protected Internal -> Scope is limited to Base CLass+Derived class which exists inside your project or assembly

2. Encapsulation  
-> Wrapping of you number of elements into a single unit  
Capsule-> Group the elements into class

4. Inheritance:

Its a process where one object gets all the properties and behaviours(methods) of its parent object automatically  
with this-> i can Reuse or modify the behaviour of my base class or parent class

Parent class-> Baseclass  
Children which are inherited-> Derived Classes

public class Employee -> Base Class  
{  
int EID;  
string Name;  
string emailid;  
double Salary;  
public double GetSalary(EID)  
{  
//Salary Calculation  
return salary;  
}  
}

public class Managers : Employee -> Derived Class  
{  
int ManagerPerks;//Additional Facilities

public void CarLeasePolicy()  
{

}  
}

void -> means returns Nothing

PolyMorphism-> One Name and Many forms

Poly-> Mutiple forms

1. Static Or Compile time Polymorphism -> Overloading-> early binding  
2. Dynamic or Runtime Polymorphism -> Overriding -> Late binding

Static->  
1. Method Overloading  
2. Operator Overloading

Method Overloading-> Same Method name but they differ in   
1. Number of Parameters  
2. Sequence of Parameters  
3. Type of Parameter

1. Number of Parameters

Public class testing  
{  
public int Addition(int a, intb)  
}

2. Sequence of Parameters

client-> Subtration(2, 4.18)

3. Type of Parameters

+, -

II. Dynamic or Runtime Polymorphism -> Overriding -> Late binding  
Method Overriding

Base Class  
Derived Class

Base Class->   
Two Keywords  
virtual -> it means Derived class-> Default implementation-> Power to Override  
override

derived Class-> Power to Override Default implementation  
override Keyword

IO Operations->  
Input and Output Operations  
1. Reading  
2. Writing  
3. Appending -> Existing + add your own content