# Serialisation

Serialisation is the process of converting an in-memory object or data structure into a format that can be easily stored (e.g. in a file) or transmitted (e.g. over a network) and later reconstructed (deserialised) into the original or equivalent object. The serialised format can be binary (compact and efficient for performance) or text-based (e.g. JSON, XML).

Common use cases for serialisation include:

* Storing data
* Data transmission
* Caching
* Inter-process communication

C# has a library for serialising objects into JSON. This can be done using the `JsonSerializer.Json()` method, which takes a `System.Object` as an argument.

The following code demonstrates how you can serialise a C# object into JSON.

public class Person  
{  
 public string Name { get; set; }  
 public int Age { get; set; }  
}  
  
  
  
class Program  
{  
 static void Main(string[] args)  
 {  
 Person person = new Person();  
 person.Name = "Joe";  
 person.Age = 20;  
 string jsonString = JsonSerializer.Serialize(person);  
 Console.WriteLine("Serialized JSON: " + jsonString);  
 }  
}

The console output from the above code is:

Serialized JSON: {"Name":"Joe","Age":20}