OOPLAB6

Part1:

Define Class Duration To include Three Attributes (Hours, Minutes, Seconds)

Implement All required Operators overloading's to enable this Code

D3=D1+D2

D3=D1 + 7800

D3=666+D3

D3=D1++ (Increase One Minute)

D3 =--D2; (Decrease One Minute)

D1= -D2;

If (D1>D2);

If (D1<=D2);

If (D1);

DateTime Obj = (DateTime) D1

Part2:

Create a class `Queue<T>` that implements a **generic queue** data structure:

Core Operations:

- `void Enqueue(T item)` – Adds an item to the end of the queue.
- `T Dequeue()` – Removes and returns the item at the front of the queue.
  If the queue is empty, throw an appropriate exception or return a default/null.
- `T Peek()` – Returns the item at the front without removing it.
- `int Count { get; }` – Returns the current number of elements in the queue.
- `bool IsEmpty { get; }` – Returns true if the queue is empty.