```
//Test Group 1
{
    var watch = Stopwatch.StartNew();
    var list = new List<int>();
    for (int j = 0; j < 300000; j++)
    {
        list.Insert(0, j);
    }
    watch.Stop();
    Console.WriteLine("Insert First::List::" + watch.ElapsedMilliseconds);
}

{
    var watch = Stopwatch.StartNew();
    var list = new LinkedList<int>();
    for (int j = 0; j < 300000; j++)
    {
        list.AddFirst(j);
    }
    watch.Stop();
    Console.WriteLine("Insert First::LinkedList::" + watch.ElapsedMilliseconds
}

//Test Group 2:
{
    var watch = Stopwatch.StartNew();
    var list = new List<int>();
    for (int j = 0; j < 300000; j++)
    {
        list.Add(j);
    }
    watch.Stop();
    Console.WriteLine("Append::List::" + watch.ElapsedMilliseconds);
}

{
    var watch = Stopwatch.StartNew();
    var list = new LinkedList<int>();
    for (int j = 0; j < 300000; j++)
    {
        list.AddLast(j);
    }
    watch.Stop();
    Console.WriteLine("Append::LinkedList::" + watch.ElapsedMilliseconds);
}
```

```
{
    var watch = Stopwatch.StartNew();
    var queue = new Queue<int>();
    for (int j = 0; j < 300000; j++)
    {
        queue.Enqueue(j);
    }
    watch.Stop();
    Console.WriteLine("Enqueue::Queue::" + watch.ElapsedMilliseconds);
}

{
    var watch = Stopwatch.StartNew();
    var queue = new ConcurrentQueue<int>();
    for (int j = 0; j < 300000; j++)
    {
        queue.Enqueue(j);
    }
    watch.Stop();
    Console.WriteLine("Enqueue::ConcurrentQueue::" + watch.ElapsedMilliseconds
}

//Test Group 3:
{
    var list = new List<int>();
    for (int j = 0; j < 300000; j++)
    {
        list.Add(j);
    }

    var watch = Stopwatch.StartNew();
    for (int j = 0; j < 300000; j++)
    {
        var value = list[0];
        list.RemoveAt(0);
    }
    watch.Stop();
    Console.WriteLine("RemoveAt(0)::List::" + watch.ElapsedMilliseconds);
}

{

    var list = new LinkedList<int>();
    for (int j = 0; j < 300000; j++)
    {
        list.AddLast(j);
    }
```

```
            var watch = Stopwatch.StartNew();
            for (int j = 0; j < 300000; j++)
            {
                var value = list.First.Value;
                list.RemoveFirst();
            }
            watch.Stop();
            Console.WriteLine("RemoveFirst::LinkedList::" + watch.ElapsedMilliseconds)
        }

        {
            var queue = new Queue<int>();
            for (int j = 0; j < 300000; j++)
            {
                queue.Enqueue(j);
            }

            var watch = Stopwatch.StartNew();
            for (int j = 0; j < 300000; j++)
            {
                var value = queue.Dequeue();
            }
            watch.Stop();
            Console.WriteLine("Dequeue::Queue::" + watch.ElapsedMilliseconds);
        }

        {
            var queue = new ConcurrentQueue<int>();
            for (int j = 0; j < 300000; j++)
            {
                queue.Enqueue(j);
            }

            var watch = Stopwatch.StartNew();
            for (int j = 0; j < 300000; j++)
            {
                int value;
                queue.TryDequeue(out value);
            }
            watch.Stop();
            Console.WriteLine("TryDequeue::ConcurrentQueue::" + watch.ElapsedMilliseco
        }
```

List::Insert First::57328 ms

List::Add::8 ms

List::RemoveAt(0)::56700 ms

LinkedList::AddFirst::34 ms

LinkedList::Append::100 ms

LinkedList::RemoveFirst::16 ms

Queue::Enqueue::15 ms

Queue::Dequeue::10 ms

ConcurrentQueue::Enqueue::138 ms

ConcurrentQueue::TryDequeue::18 ms