Read XML with LINQ – Generate Xml result

string fileName = "Orders.xml";

var doc = XDocument.Load(fileName);

var result = new XElement("ModifiedOrders",

from o in doc.Descendants("Order")

select new XElement("Order",

new XAttribute("OrderID", (string)o.Attribute("OrderNumber")),

new XAttribute("TotalFreight",

o.Elements("LineItem").Sum(li=>(decimal) li.Attribute("Freight"))),

from li in o.Elements("LineItem")

select new XElement("Item",

new XAttribute("ID", (int)li.Attribute("PID")),

new XAttribute("Price", (decimal)li.Attribute("Price")),

new XAttribute("LineTotal", (decimal)li.Attribute("Price") \* (int)li.Attribute("Qty"))

)

)

);

// CREATES FILES Results.xml

result.Save(Path.Combine(Environment.GetFolderPath(Environment.SpecialFolder.Desktop), "Results.xml"));