

Entity Framework - LINQ שליפות/הוספה/עדכון/מחיקה - הדגמה

```
var context = new LibraryDBContext();

var books = context.BooksTbl.ToList();

foreach (BooksTbl b in books)
{
    Console.WriteLine(b.BookName + " \t\t" + b.CategoryId + " \t" + b.PublishYear + "
\t" + b.Price);
}

Console.WriteLine("=====");

var category2 = context.BooksTbl.Where(b => b.CategoryId == 2).ToList();

var exists4 = context.BooksTbl.Any(b => b.CategoryId == 2);

//sort
var orderByYear = context.BooksTbl.OrderBy(x => x.PublishYear); //ThenBy() for secondary
sort

foreach (BooksTbl b in orderByYear)
{
    Console.WriteLine(b.BookName + " " + b.PublishYear);
}

Console.WriteLine("=====");

var orderByYearDESC = context.BooksTbl.OrderByDescending(x => x.PublishYear);

foreach (BooksTbl b in orderByYearDESC)
{
    Console.WriteLine(b.BookName + " " + b.PublishYear);
}

////sum, avg, count
///
int sum5 = context.BooksTbl.Where(b => b.CategoryId == 5).ToList().Sum(x => x.Price);

double avg5 = context.BooksTbl.Where(b => b.CategoryId == 5).ToList().Average(x =>
x.Price);
double count5 = context.BooksTbl.Where(b => b.CategoryId == 5).ToList().Count;

Console.WriteLine("sum--->" + sum5);
Console.WriteLine("avg--->" + avg5);
Console.WriteLine("count--->" + count5);
```

```

////////// before insert
var cat = context.CategoriesTbl.ToList();

foreach (CategoriesTbl c in cat)
{
    Console.WriteLine(c.CategoryId + " \t" + c.CategoryName + " \t" + c.CategoryDesc);
}

//////////insert

var category = new CategoriesTbl() { CategoryName = "romance", CategoryDesc = "blabla"

};

context.CategoriesTbl.Add(category);
context.SaveChanges();

//insert many
List<CategoriesTbl> lst = new List<CategoriesTbl>();
lst.Add(new CategoriesTbl() { CategoryName = "romance", CategoryDesc = "1" });
lst.Add(new CategoriesTbl() { CategoryName = "romance2", CategoryDesc = "2" });
lst.Add(new CategoriesTbl() { CategoryName = "romance3", CategoryDesc = "3" });
context.CategoriesTbl.AddRange(lst);
context.SaveChanges();
Console.WriteLine("+++++++");

var cat = context.CategoriesTbl.ToList();

foreach (CategoriesTbl c in cat)
{
    Console.WriteLine(c.CategoryId + " \t" + c.CategoryName + " \t" + c.CategoryDesc);
}
//update

var c1 = context.CategoriesTbl.Where(c => c.CategoryId == 2).FirstOrDefault();
c1.CategoryDesc = "test";
context.SaveChanges();

//delete
var c8 = context.CategoriesTbl.Where(c => c.CategoryId == 8).FirstOrDefault();

context.CategoriesTbl.Remove(c8);
context.SaveChanges();

cat = context.CategoriesTbl.ToList();

foreach (CategoriesTbl c in cat)
{
    Console.WriteLine(c.CategoryId + " \t" + c.CategoryName + " \t" + c.CategoryDesc);
}

```