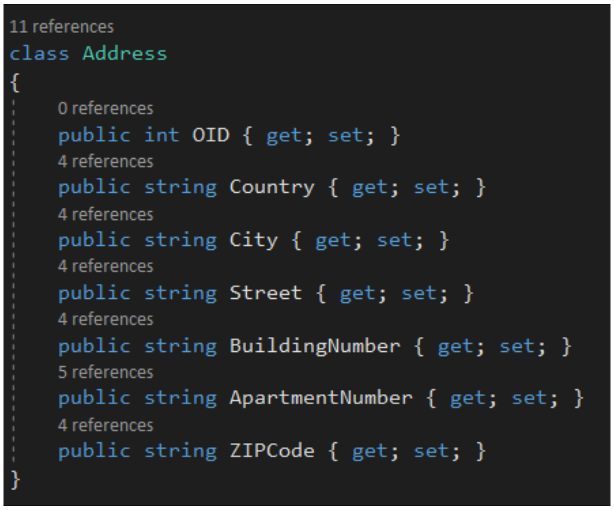
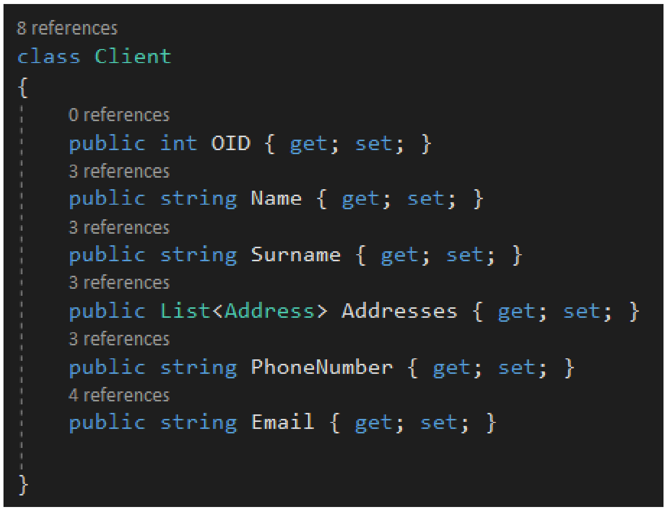
Baza danych: Siaqodb

Instalacja i konfiguracja: należy dodać pakiet NuGet „Siaqodb” do projektu.

Tworzenie obiektów rozpoczyna się od stworzenia klas, np.

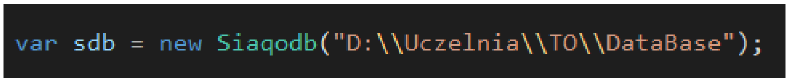


```
11 references
class Address
{
    0 references
    public int OID { get; set; }
    4 references
    public string Country { get; set; }
    4 references
    public string City { get; set; }
    4 references
    public string Street { get; set; }
    4 references
    public string BuildingNumber { get; set; }
    5 references
    public string ApartmentNumber { get; set; }
    4 references
    public string ZIPCode { get; set; }
}
```



```
8 references
class Client
{
    0 references
    public int OID { get; set; }
    3 references
    public string Name { get; set; }
    3 references
    public string Surname { get; set; }
    3 references
    public List<Address> Addresses { get; set; }
    3 references
    public string PhoneNumber { get; set; }
    4 references
    public string Email { get; set; }

}
```

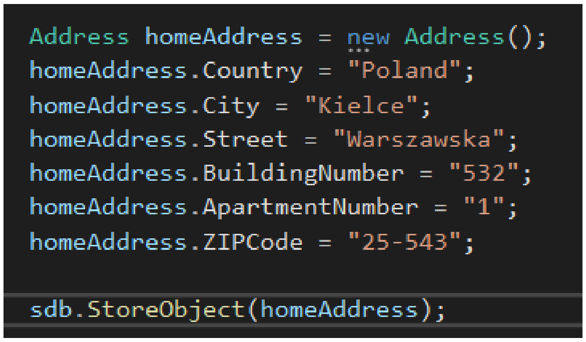
W programie głównym należy dodać `using Sqo;`
Utworzenie bazy:



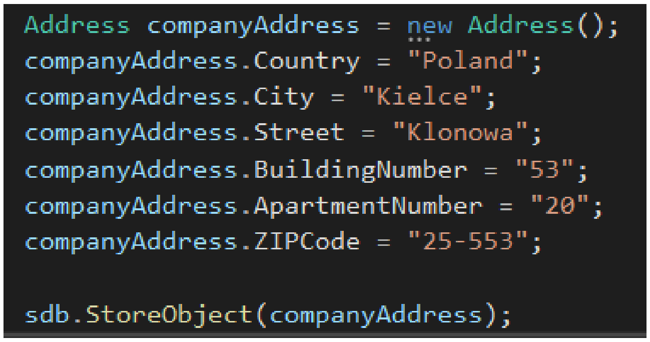
```
var sdb = new Siaqodb("D:\\Uczelnia\\TO\\DataBase");
```

Stworzenie i umieszczenie obiektu w bazie:

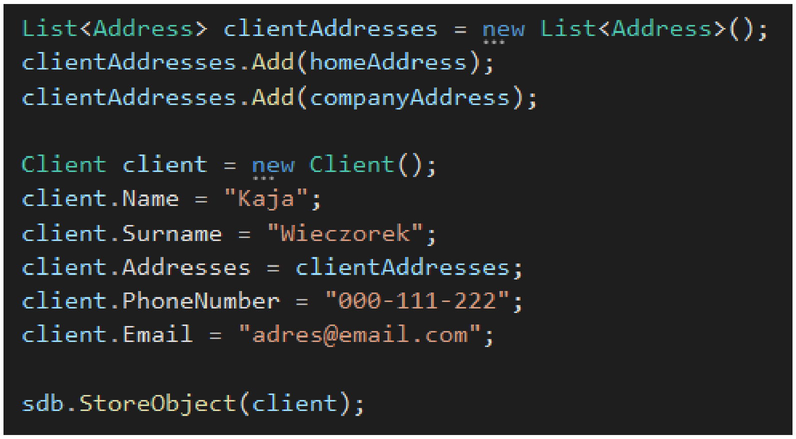
Pole *OID* jest automatycznie uzupełniane przy dodawaniu obiektu do bazy.



```
Address homeAddress = new Address();
homeAddress.Country = "Poland";
homeAddress.City = "Kielce";
homeAddress.Street = "Warszawska";
homeAddress.BuildingNumber = "532";
homeAddress.ApartmentNumber = "1";
homeAddress.ZIPCode = "25-543";

sdb.StoreObject(homeAddress);
```

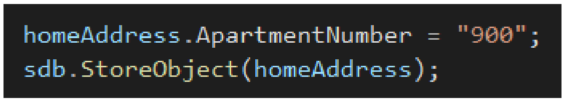


```
Address companyAddress = new Address();
companyAddress.Country = "Poland";
companyAddress.City = "Kielce";
companyAddress.Street = "Klonowa";
companyAddress.BuildingNumber = "53";
companyAddress.ApartmentNumber = "20";
companyAddress.ZIPCode = "25-553";

sdb.StoreObject(companyAddress);
```



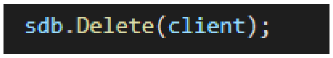
```
List<Address> clientAddresses = new List<Address>();
clientAddresses.Add(homeAddress);
clientAddresses.Add(companyAddress);

Client client = new Client();
client.Name = "Kaja";
client.Surname = "Wieczorek";
client.Addresses = clientAddresses;
client.PhoneNumber = "000-111-222";
client.Email = "adres@email.com";

sdb.StoreObject(client);
```

Zmiana i zaktualizowanie obiektu:



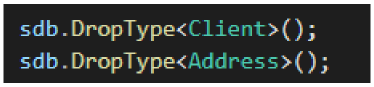
```
homeAddress.ApartmentNumber = "900";
sdb.StoreObject(homeAddress);
```

Usunięcie obiektu:



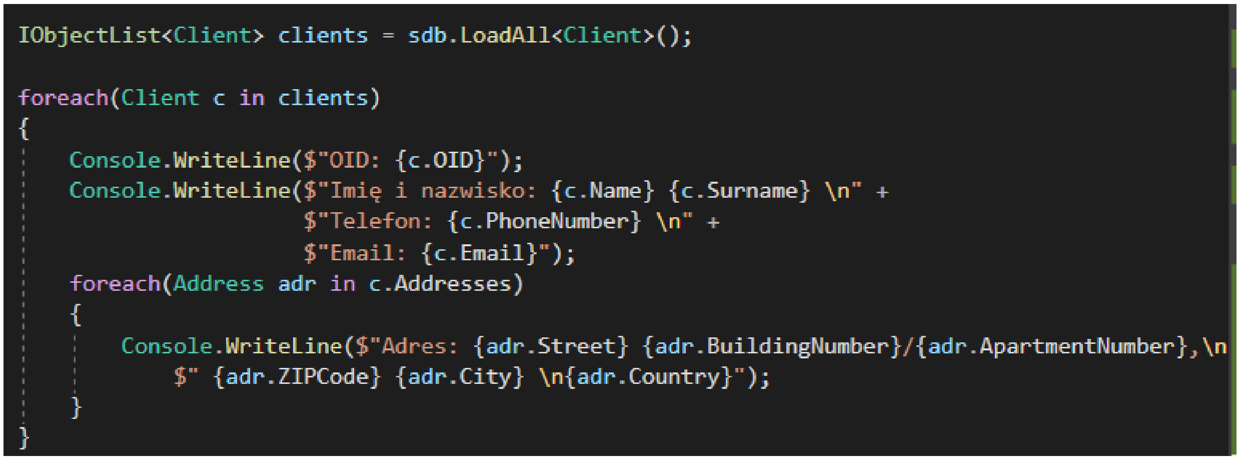
```
sdb.Delete(client);
```

Usunięcie wszystkich obiektów danego typu:



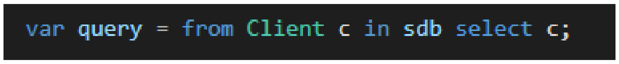
```
sdb.DropType<Client>();
sdb.DropType<Address>();
```

Pobranie i wyświetlenie danych:



```
IObjectList<Client> clients = sdb.LoadAll<Client>();

foreach(Client c in clients)
{
    Console.WriteLine($"OID: {c.OID}");
    Console.WriteLine($"Imię i nazwisko: {c.Name} {c.Surname} \n" +
                      $"Telefon: {c.PhoneNumber} \n" +
                      $"Email: {c.Email}");
    foreach(Address adr in c.Addresses)
    {
        Console.WriteLine($"Adres: {adr.Street} {adr.BuildingNumber}/{adr.ApartmentNumber},\n
            $" {adr.ZIPCode} {adr.City} \n{adr.Country}");
    }
}
```

Zapytanie:



```
var query = from Client c in sdb select c;
```