

## Ejercicio 4.

### 01elementCollections

```
Vacaciones del empleado NADIA
17:01:36.790 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT DAYS, STARTDATE, Employee_ID FROM Employee_VACATIONBOOKINGS WHERE (Employee_ID = ?)
VacationEntry [startDate=java.util.GregorianCalendar[time=1588309200000,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.calendar.ZoneInfo[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,transitions=99,lastRule=java.util.SimpleTimeZone[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,startYear=0,startMode=3,startMonth=3,startDay=1,startDayOfWeek=1,startTime=7200000,startTimeMode=0,endMode=2,endMonth=9,endDay=-1,endDayOfWeek=1,endTime=7200000,endTimeMode=0]],firstDayOfWeek=1,minimalDaysInFirstWeek=1,ERA=1,YEAR=2020,MONTH=3,MONTH_OF_YEAR=3,DAY_OF_MONTH=1,AM_PM=0,HOUR=0,HOUR_OF_DAY=0,MINUTE=0,SECOND=0,MILLISECOND=0,ZONE_OFFSET=-21600000,DST_OFFSET=3600000], daysTaken=8]
VacationEntry [startDate=java.util.GregorianCalendar[time=1623733200000,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.calendar.ZoneInfo[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,transitions=99,lastRule=java.util.SimpleTimeZone[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,startYear=0,startMode=3,startMonth=3,startDay=1,startDayOfWeek=1,startTime=7200000,startTimeMode=0,endMode=2,endMonth=9,endDay=-1,endDayOfWeek=1,endTime=7200000,endTimeMode=0]],firstDayOfWeek=1,minimalDaysInFirstWeek=1,ERA=1,YEAR=2020,MONTH=3,MONTH_OF_YEAR=3,DAY_OF_MONTH=1,AM_PM=0,HOUR=0,HOUR_OF_DAY=0,MINUTE=0,SECOND=0,MILLISECOND=0,ZONE_OFFSET=-21600000,DST_OFFSET=3600000], daysTaken=7]
VacationEntry [startDate=java.util.GregorianCalendar[time=1641016800000,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.calendar.ZoneInfo[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,transitions=99,lastRule=java.util.SimpleTimeZone[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,startYear=0,startMode=3,startMonth=3,startDay=1,startDayOfWeek=1,startTime=7200000,startTimeMode=0,endMode=2,endMonth=9,endDay=-1,endDayOfWeek=1,endTime=7200000,endTimeMode=0]],firstDayOfWeek=1,minimalDaysInFirstWeek=1,ERA=1,YEAR=2020,MONTH=3,MONTH_OF_YEAR=3,DAY_OF_MONTH=1,AM_PM=0,HOUR=0,HOUR_OF_DAY=0,MINUTE=0,SECOND=0,MILLISECOND=0,ZONE_OFFSET=-21600000,DST_OFFSET=3600000], daysTaken=7]
17:01:36.791 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT t0.NICKNAMES FROM Employee_NICKNAMES t0 WHERE (t0.Employee_ID = ?)
Employee [id=400, name=MARCO, salary=4000
, vacationBookings= {IndirectList: not instantiated}
, nickNames={IndirectSet: not instantiated}]

Vacaciones del empleado MARCO
17:01:36.792 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT DAYS, STARTDATE, Employee_ID FROM Employee_VACATIONBOOKINGS WHERE (Employee_ID = ?)
17:01:36.792 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT t0.NICKNAMES FROM Employee_NICKNAMES t0 WHERE (t0.Employee_ID = ?)
MARCOS
Employee [id=401, name=Kevin Lara, salary=5000
, vacationBookings= {IndirectList: not instantiated}
, nickNames={IndirectSet: not instantiated}]

Vacaciones del empleado Kevin Lara
17:01:36.793 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT DAYS, STARTDATE, Employee_ID FROM Employee_VACATIONBOOKINGS WHERE (Employee_ID = ?)
17:01:36.793 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT t0.NICKNAMES FROM Employee_NICKNAMES t0 WHERE (t0.Employee_ID = ?)
Borrego
kevinlara@mla:/media/kevinlara/LinuxStorage1/Documents/Diplomado_Java/Java_Diplomat/Modulo11/Practicas/6/ml104CollectionMappings$
```

### 02-overrideCollectionTableColumn

```
Employee [id=200, name=PAULA, salary=2000
, vacationBookings= {[VacationEntry [startDate=java.util.GregorianCalendar[time=1583040000,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.calendar.ZoneInfo[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,transitions=99,lastRule=java.util.SimpleTimeZone[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,startYear=0,startMode=3,startMonth=3,startDay=1,startDayOfWeek=1,startTime=7200000,startTimeMode=0,endMode=2,endMonth=9,endDay=-1,endDayOfWeek=1,endTime=7200000,endTimeMode=0]],firstDayOfWeek=1,minimalDaysInFirstWeek=1,ERA=1,YEAR=2020,MONTH=3,MONTH_OF_YEAR=3,DAY_OF_MONTH=1,AM_PM=0,HOUR=0,HOUR_OF_DAY=0,MINUTE=0,SECOND=0,MILLISECOND=0,ZONE_OFFSET=-21600000,DST_OFFSET=3600000], daysTaken=4]]}
, nickNames={([PAULita])}]

Employee [id=300, name=NADIA, salary=3000
, vacationBookings= {[VacationEntry [startDate=java.util.GregorianCalendar[time=1588309200000,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.calendar.ZoneInfo[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,transitions=99,lastRule=java.util.SimpleTimeZone[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,startYear=0,startMode=3,startMonth=3,startDay=1,startDayOfWeek=1,startTime=7200000,startTimeMode=0,endMode=2,endMonth=9,endDay=-1,endDayOfWeek=1,endTime=7200000,endTimeMode=0]],firstDayOfWeek=1,minimalDaysInFirstWeek=1,ERA=1,YEAR=2020,MONTH=3,MONTH_OF_YEAR=3,DAY_OF_MONTH=1,AM_PM=0,HOUR=0,HOUR_OF_DAY=0,MINUTE=0,SECOND=0,MILLISECOND=0,ZONE_OFFSET=-21600000,DST_OFFSET=3600000], daysTaken=7], VacationEntry [startDate=java.util.GregorianCalendar[time=1623733200000,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.calendar.ZoneInfo[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,transitions=99,lastRule=java.util.SimpleTimeZone[id="America/Mexico City",offset=-21600000,dstSavings=3600000,useDaylight=true,startYear=0,startMode=3,startMonth=3,startDay=1,startDayOfWeek=1,startTime=7200000,startTimeMode=0,endMode=2,endMonth=9,endDay=-1,endDayOfWeek=1,endTime=7200000,endTimeMode=0]],firstDayOfWeek=1,minimalDaysInFirstWeek=1,ERA=1,YEAR=2020,MONTH=3,MONTH_OF_YEAR=3,DAY_OF_MONTH=1,AM_PM=0,HOUR=0,HOUR_OF_DAY=0,MINUTE=0,SECOND=0,MILLISECOND=0,ZONE_OFFSET=-21600000,DST_OFFSET=3600000], daysTaken=7]}
, nickNames={([[]])}]

Employee [id=400, name=MARCO, salary=4000
, vacationBookings= {[[]]}
, nickNames={([MARCOS])}]

Employee [id=401, name=Kevin Lara, salary=5000
, vacationBookings= {[[]]}
, nickNames={([Borrego])}]

Employee [id=402, name=Kevin Lara, salary=5000
, vacationBookings= {[[]]}
, nickNames={([Borrego])}]
```

03-tablePerConcreteClass

```
KEVIN ARTURO LARA SALA
19:15:14.779 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT ID, NAME, S_DATE FROM EMPLOYEE
19:15:14.783 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT ID, H_RATE, NAME, S_DATE, VACATION, MGR FROM PT_EMP
19:15:14.793 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT ID, D_RATE, FULLNAME, SDATE, TERM FROM CONTRACT_EMP
19:15:14.795 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT ID, NAME, PENSION, SALARY, S_DATE, VACATION, MANAGE
Empleados localizados
PartTimeEmployee [id: 7 name: MARTHA, StartDate: Mon Nov 01 00:00:00 CST 2004, HourlyRate: 17.0, Vacation: 15]
PartTimeEmployee [id: 8 name: RAUL, StartDate: Mon Dec 05 00:00:00 CST 2005, HourlyRate: 16.0, Vacation: 15]
PartTimeEmployee [id: 9 name: JAZMIN, StartDate: Tue Jan 03 00:00:00 CST 2006, HourlyRate: 15.0, Vacation: 10]
ContractEmployee [Id: 1, Name: OSCAR
StartDate: Mon Jan 01 00:00:00 CST 2001
dailyRate=500, term= + 12]
ContractEmployee [Id: 2, Name: PAULA
StartDate: Mon Apr 08 00:00:00 CDT 2002
dailyRate=600, term= + 24]
ContractEmployee [Id: 3, Name: NADIA
StartDate: Tue Jun 10 00:00:00 CDT 2003
dailyRate=700, term= + 18]
FullTimeEmployee [Id: 4, Name: MARCOStartDate: Thu Jul 01 00:00:00 CDT 2004Vacation: 15salary: 55000, pensionContribution: 100000]
FullTimeEmployee [Id: 5, Name: JUANStartDate: Tue Sep 09 00:00:00 CDT 2003Vacation: 15salary: 59000, pensionContribution: 200000]
FullTimeEmployee [Id: 6, Name: SAMANTASStartDate: Sun Mar 12 00:00:00 CST 2000Vacation: 20salary: 60000, pensionContribution: 450000]
kevinlara@mila:/media/kevinlara/LinuxStorage1/Documents/Diplomado_Java/Java_Diplomat/Modulo11/Practicas/7/m1104TablePerClass$
```

04-singleTableInheritance

Tabla Emp.

modulo11

Table

EMP 9

View

ID	NAME	S_DATE	D_RATE	TERM	VACATION	H_RATE	SALARY	PENSION	EMP_TYPE
int(11)	varchar(255)	date	int(11)	int(11)	int(11)	float	bigint(20)	bigint(20)	varchar(32)
1	OSCAR	2001-01-01	500	12	(NULL)	(NULL)	(NULL)	(NULL)	ContractEmployee
2	PAULA	2002-04-08	600	24	(NULL)	(NULL)	(NULL)	(NULL)	ContractEmployee
3	NADIA	2003-06-10	700	18	(NULL)	(NULL)	(NULL)	(NULL)	ContractEmployee
4	MARCO	2004-07-01	(NULL)	(NULL)	15	(NULL)	55000	100000	FTEmp
5	JUAN	2003-09-09	(NULL)	(NULL)	15	(NULL)	59000	200000	FTEmp
6	SAMANTA	2000-03-12	(NULL)	(NULL)	20	(NULL)	60000	450000	FTEmp
7	MARTHA	2004-11-01	(NULL)	(NULL)	15	17	(NULL)	(NULL)	PTEmp
8	RAUL	2005-12-05	(NULL)	(NULL)	15	16	(NULL)	(NULL)	PTEmp
9	JAZMIN	2006-01-03	(NULL)	(NULL)	10	15	(NULL)	(NULL)	PTEmp

Salida.

```
KEVIN ARTURO LARA SALA
21:27:21.556 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT ID, EMP_TYPE, NAME, S_DATE, H_RATE, VACATION, D_RATE, TERM, PENSION, SALARY FROM EMP
Empleados localizados
ContractEmployee [Id: 1, Name: OSCAR
StartDate: Mon Jan 01 00:00:00 CST 2001
dailyRate=500, term= + 12]
ContractEmployee [Id: 2, Name: PAULA
StartDate: Mon Apr 08 00:00:00 CDT 2002
dailyRate=600, term= + 24]
ContractEmployee [Id: 3, Name: NADIA
StartDate: Tue Jun 10 00:00:00 CDT 2003
dailyRate=700, term= + 18]
FullTimeEmployee [Id: 4, Name: MARCOStartDate: Thu Jul 01 00:00:00 CDT 2004Vacation: 15salary: 55000, pension: 100000]
FullTimeEmployee [Id: 5, Name: JUANStartDate: Tue Sep 09 00:00:00 CDT 2003Vacation: 15salary: 59000, pension: 200000]
FullTimeEmployee [Id: 6, Name: SAMANTASStartDate: Sun Mar 12 00:00:00 CST 2000Vacation: 20salary: 60000, pension: 450000]
PartTimeEmployee [id: 7 name: MARTHA, StartDate: Mon Nov 01 00:00:00 CST 2004, HourlyRate: 17.0, Vacation: 15]
PartTimeEmployee [id: 8 name: RAUL, StartDate: Mon Dec 05 00:00:00 CST 2005, HourlyRate: 16.0, Vacation: 15]
PartTimeEmployee [id: 9 name: JAZMIN, StartDate: Tue Jan 03 00:00:00 CST 2006, HourlyRate: 15.0, Vacation: 10]
kevinlara@mila:/media/kevinlara/LinuxStorage1/Documents/Diplomado_Java/Java_Diplomat/Modulo11/Practicas/8/m1104SingleTableInheritance$
```

# 05-joinedTableInheritance

## Tablas

```
modulo11
├── Table
│   ├── CONTRACT_EMP 3
│   ├── EMP 9
│   ├── FT_EMP 3
│   ├── PT_EMP 3
│   └── View
```

SELECT \* FROM EMP LIMIT 100;

Input To Search Data

Cost: 2ms

< 1 > Total 9

		ID int(11)	NAME varchar(255)	S_DATE date	EMP_TYPE int(11)
		Filter	Filter	Filter	Filter
<input type="checkbox"/>	1	1	OSCAR	2001-01-01	1
<input type="checkbox"/>	2	2	PAULA	2002-04-08	1
<input type="checkbox"/>	3	3	NADIA	2003-06-10	1
<input type="checkbox"/>	4	4	MARCO	2004-07-01	2
<input type="checkbox"/>	5	5	JUAN	2003-09-09	2
<input type="checkbox"/>	6	6	SAMANTA	2000-03-12	2
<input type="checkbox"/>	7	7	MARTHA	2004-11-01	3
<input type="checkbox"/>	8	8	RAUL	2005-12-05	3
<input type="checkbox"/>	9	9	JAZMIN	2006-01-03	3

SELECT \* FROM CONTRACT\_EMP LIMIT 100;








Input To Search Data

Cost: 3ms

< 1 > Total 3








		ID int(11)	D_RATE int(11)	TERM int(11)
		Filter	Filter	Filter
<input type="checkbox"/>	1	1	500	12
<input type="checkbox"/>	2	2	600	24
<input type="checkbox"/>	3	3	700	18

SELECT \* FROM FT\_EMP LIMIT 100;

Input To Search Data        Cost: 2ms < 1 > Total 3

		ID int(11)	VACATION int(11)	SALARY bigint(20)	PENSION bigint(20)
		Filter	Filter	Filter	Filter
<input type="checkbox"/>	1	4	15	55000	100000
<input type="checkbox"/>	2	5	15	59000	200000
<input type="checkbox"/>	3	6	20	60000	450000

SELECT \* FROM PT\_EMP LIMIT 100;

Input To Search Data        Cost: 3ms < 1 > Total 3

		ID int(11)	VACATION int(11)	H_RATE float
		Filter	Filter	Filter
<input type="checkbox"/>	1	7	15	17
<input type="checkbox"/>	2	8	15	16
<input type="checkbox"/>	3	9	10	15

## Salida.

```

20:38:53.717 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT DISTINCT EMP_TYPE FROM EMP
20:38:53.665 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT t0.ID, t0.EMP_TYPE, t0.NAME, t0.S_DATE, t1.ID, t1.D
20:38:53.670 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT t0.ID, t0.EMP_TYPE, t0.NAME, t0.S_DATE, t1.ID, t1.P
20:38:53.671 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT t0.ID, t0.EMP_TYPE, t0.NAME, t0.S_DATE, t1.ID, t1.P
20:38:53.672 [main] DEBUG o.m.jdbc.client.impl.StandardClient - execute query: SELECT t0.ID, t0.EMP_TYPE, t0.NAME, t0.S_DATE, t1.ID, t1.H
Empleados localizados
ContractEmployee [Id: 1, Name: OSCAR
StartDate: Mon Jan 01 00:00:00 CST 2001
dailyRate=500, term= + 12]
ContractEmployee [Id: 2, Name: PAULA
StartDate: Mon Apr 08 00:00:00 CDT 2002
dailyRate=600, term= + 24]
ContractEmployee [Id: 3, Name: NADIA
StartDate: Tue Jun 10 00:00:00 CDT 2003
dailyRate=700, term= + 18]
FullTimeEmployee [Id: 4, Name: MARCOStartDate: Thu Jul 01 00:00:00 CDT 2004Vacation: 15salary: 55000, pension: 100000]
FullTimeEmployee [Id: 5, Name: JUANStartDate: Tue Sep 09 00:00:00 CDT 2003Vacation: 15salary: 59000, pension: 200000]
FullTimeEmployee [Id: 6, Name: SAMANTASStartDate: Sun Mar 12 00:00:00 CST 2000Vacation: 20salary: 60000, pension: 450000]
PartTimeEmployee [id: 7 name: MARTHA, StartDate: Mon Nov 01 00:00:00 CST 2004, HourlyRate: 17.0, Vacation: 15]
PartTimeEmployee [id: 8 name: RAUL, StartDate: Mon Dec 05 00:00:00 CST 2005, HourlyRate: 16.0, Vacation: 15]
PartTimeEmployee [id: 9 name: JAZMIN, StartDate: Tue Jan 03 00:00:00 CST 2006, HourlyRate: 15.0, Vacation: 10]
kevinlara@mila:/media/kevinlara/LinuxStorage1/Documents/Diplomado_Java/Java_Diplomat/Modulo11/Practicas/9/m1104JoinedTableInheritances$

```