

**01: A**

```

/employees/employee
/child::employees/child::employee
//employee
//child::employee
/descendant-or-self::node()/child::employee

```

**01: B**

```

/employees/employee/lastName/text()
/employees/employee/lastName/child::text()
//employee/lastName/text()
//lastName/text()

```

**01: C**

```

distinct-values(/employees/employee/lastName/text())

```

**01: D**

```

/employees/employee[lastName = "Smith"]/salary
//employee[lastName = "Smith"]/salary
//employee[child::lastName = "Smith"]/salary
//employee[./child::lastName = "Smith"]/salary

```

**02**

```

/employees/employee[salary > avg(/employees/employee/salary)]/email
//employee[salary > avg(//salary)]/email
//employee[./salary > avg(//salary)]/email
//employee[./salary > avg(//salary/text())]/email

```

**03**

```

data(//department[not(employee)]/@id)
data(//child::department[not(child::employee)]/attribute::id)
data(/descendant-or-self::node()/child::department[not(employee)]/@id)

```

**04: NOT working solution**

```

//department[last()]/name
/descendant-or-self::node()/department[last()]/name

```

**04**

```

/descendant::department[last()]/name
/descendant::department[position() = last()]/name
/descendant-or-self::department[last()]/name
(//department)[last()]/name
//department[not(following::department) and not(descendant::department)]/name
//department[not(following::department or descendant::department)]/name
//department[count(following::department) + count(descendant::department) = 0]/name

```

**05**

```

data(//department[count(//department) >= 2]/@id)
data(//department[count(./descendant::department) >= 2]/@id)

```

**06**

```

data(//department[@id = "D1.2.1"]/ancestor-or-self::department[last()]/@id)
data(/departments/department[descendant-or-self::department[@id = "D1.2.1"]]/@id)

```