

# TP10 - LABD

*Durand Jean-Frédéric*

## Exercice 1

### Question 1

```
SELECT DISTINCT ?x WHERE
{
  ?x a rdfs:Class
}
```

### Question 2

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>
SELECT DISTINCT ?x WHERE
{
  ?x rdfs:domain sch:Sport
}
```

### Question 3

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>
SELECT DISTINCT ?x WHERE
{
  ?x rdf:type sch:Sport
}
```

### Question 4

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>
SELECT DISTINCT ?x ?t WHERE
{
  ?x rdfs:comment ?t
  FILTER regex(?t, "sport")
}
```

### Question 5

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>
SELECT DISTINCT ?x WHERE
{
  ?x a sch:Sport
  FILTER NOT EXISTS { ?x sch:utiliseMateriel ?y }
}
```

## Question 6

1)

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>

SELECT ?x WHERE
{
  ?x sch:pratique ?t
}
GROUP BY ?x
HAVING (COUNT (?t) > 1)
```

2)

## Question 7

1)

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>

SELECT ?x WHERE
{
  ?x sch:pratique ?t
}
GROUP BY ?x
HAVING (COUNT (?t) = 1)
```

2)

## Question 8

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>
SELECT ?x (count(?t) as ?y) WHERE
{
  ?x sch:pratique ?t
}
GROUP BY ?x
```

## Question 9

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>
```

```
PREFIX ins: <http://www.labd.org/2015/sport/instance#>
SELECT ?x WHERE
{
  ins:Basket sch:match/sch:duree/rdfs:member ?x
}
```

## Question 10

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>
PREFIX ins: <http://www.labd.org/2015/sport/instance#>
SELECT ?x WHERE
{
  ins:Basket sch:match/sch:duree/rdfs:member ?x
  FILTER regex(?x, "NBA")
}
```

## Question 11

```
PREFIX sch: <http://www.labd.org/2015/sport/schema#>
PREFIX ins: <http://www.labd.org/2015/sport/instance#>
SELECT ?x ?t WHERE
{
  ?x a sch:SportCollectif
  ?x sch:match/sch:duree/rdfs:member? ?t
  FILTER isLiteral(?t)
}
```

## Exercice 2

### Question 1

```
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX james: <http://bond007.org/RDF/mes_donnees.rdf#>
SELECT ?x ?t WHERE
{
  james:me foaf:knows ?y
  ?y foaf:name ?x
  OPTIONAL {?y foaf:homepage ?t}
}
```

### Question 2

```
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX james: <http://bond007.org/RDF/mes_donnees.rdf#>
SELECT ?x ?t WHERE
{
  james:me foaf:knows ?y
  ?y foaf:name ?x
  OPTIONAL {?y foaf:homepage | foaf:interest | foaf:workplaceHomepage ?t}
}
```

### Question 3

```
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX james: <http://bond007.org/RDF/mes_donnees.rdf#>
SELECT ?x WHERE
{
  james:me foaf:knows+/foaf:name ?x
  FILTER NOT EXISTS { ?x foaf:name "James Bond" }
}
```

### Question 4

```
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX james: <http://bond007.org/RDF/mes_donnees.rdf#>
SELECT ?x WHERE
{
  james:me foaf:knows ?y
  ?y foaf:name ?x
  FILTER NOT EXISTS { ?y foaf:phone ?z }
}
```

### Question 5

```
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX james: <http://bond007.org/RDF/mes_donnees.rdf#>
SELECT ?x (count(?t) as ?y) WHERE
{
  ?x a foaf:Person
  ?x foaf:knows ?t
}
GROUP BY ?x
```