Clase

FolDemo.java

Código

```
	private static void entregableDemo1(InferenceProcedure ip) {
		StandardizeApartIndexicalFactory.flush();

		FOLKnowledgeBase kb = FOLKnowledgeBaseFactory
				.createEntregableKnowledgeBase(ip);

		String kbStr = kb.toString();

		String query = "EXISTS x (Niño(x) AND Aburrir(x))";

		InferenceResult answer = kb.ask(query);

		System.out.println("\nEntregable Knowledge Base:");
		System.out.println(kbStr);
		System.out.println("Query: " + query);
		for (Proof p : answer.getProofs()) {
			System.out.print(ProofPrinter.printProof(p));
			System.out.println("");
		}
	}
```

Clase

FOLKnowledgeBaseFactory.java

Código

```
	public static FOLKnowledgeBase
createEntregableKnowledgeBase(InferenceProcedure infp) {
		FOLKnowledgeBase kb = new
FOLKnowledgeBase(DomainFactory.entregable(), infp);
		kb.tell("EXISTS x (DibujoAnimado(x) AND NOT Infantil(x))");
		kb.tell("FORALL x (DibujoAnimado(x) AND NOT Infantil(x) =>
ParaAdulto(x))");
		kb.tell("FORALL x FORALL y (Niño(x) AND DibujoAnimado(y) AND
Ver(x,y) AND ParaAdulto(y) => (Entender(x,y) AND Aburrir(x)))");
		kb.tell("(DibujoAnimado(Simpsons) AND ParaAdulto(Simpsons))");
		kb.tell("(Niño(Juan) AND Ver(Juan,Simpsons))");
		return kb;
	}
```

Clase

DomainFactory.java

Código

```
	public static FOLDomain entregable() {
		FOLDomain domain = new FOLDomain();
		domain.addPredicate("DibujoAnimado");
		domain.addPredicate("Infantil");
		domain.addPredicate("ParaAdulto");
		domain.addPredicate("Niño");
		domain.addPredicate("Entender");
		domain.addPredicate("Aburrir");
		domain.addPredicate("Ver");

		domain.addConstant("Simpsons");
		domain.addConstant("Juan");
		return domain;
	}
```

Salida

```
Entregable Knowledge Base:
EXISTS x (DibujoAnimado(x) AND NOT(Infantil(x)))
FORALL x ((DibujoAnimado(x) AND NOT(Infantil(x))) => ParaAdulto(x))
FORALL x FORALL y ((((Niño(x) AND DibujoAnimado(y)) AND Ver(x,y)) AND
ParaAdulto(y)) => (Entender(x,y) AND Aburrir(x)))
(DibujoAnimado(Simpsons) AND ParaAdulto(Simpsons))
(Niño(Juan) AND Ver(Juan,Simpsons))

Query: EXISTS x (Niño(x) AND Aburrir(x))
Proof, Answer Bindings: {x=Juan}
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
|Step | Proof
|Justification
|
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
|1    | (DibujoAnimado(Simpsons) AND ParaAdulto(Simpsons))
|Premise
|
|2    | (DibujoAnimado(Simpsons) AND ParaAdulto(Simpsons))
|Premise
|
|3    | (Niño(Juan) AND Ver(Juan,Simpsons))
|Premise
|
|4    | (Niño(Juan) AND Ver(Juan,Simpsons))
|Premise
|
|5    | FORALL x FORALL y ((((Niño(x) AND DibujoAnimado(y)) AND Ver(x,y)) AND
ParaAdulto(y)) => (Entender(x,y) AND Aburrir(x))) |Premise
|
|6    | [~Aburrir(v10), ~Niño(v10), Answer0(v10)]
|Goal
|
|7    | [DibujoAnimado(Simpsons)]
|Clausified 1
|
```

```
|8    | [ParaAdulto(Simpsons)]
|Clausified 2
|
|9    | [Niño(Juan)]
|Clausified 3
|
|10   | [Ver(Juan,Simpsons)]
|Clausified 4
|
|11   | [~DibujoAnimado(y), ~Niño(x), ~ParaAdulto(y), ~Ver(x,y), Aburrir(x)]
|Clausified 5
|
|12   | [~DibujoAnimado(v4), ~Niño(v3), ~ParaAdulto(v4), ~Ver(v3,v4),
Aburrir(v3)]                                                  |Renaming of 11
|
|13   | [~DibujoAnimado(v9), ~Niño(v8), ~ParaAdulto(v9), ~Ver(v8,v9),
Aburrir(v8)]                                                  |Renaming of 12
|
|14   | [~DibujoAnimado(c17), ~Niño(c18), ~ParaAdulto(c17), ~Ver(c18,c17),
Answer0(c18)]                                          |Resolution: 6, 13
[Aburrir(v8), ~Aburrir(v10)], subst={v8=v10}, renaming={v9=c17, v10=c18}
|
|15   | [~DibujoAnimado(Simpsons), ~Niño(Juan), ~ParaAdulto(Simpsons),
Answer0(Juan)]                                           |Resolution: 10, 14
[Ver(Juan,Simpsons), ~Ver(c18,c17)], subst={c18=Juan, c17=Simpsons},
renaming={} |
|16   | [~DibujoAnimado(Simpsons), ~ParaAdulto(Simpsons), Answer0(Juan)]
|Resolution: 9, 15  [Niño(Juan), ~Niño(Juan)], subst={}, renaming={}
|
|17   | [~DibujoAnimado(Simpsons), Answer0(Juan)]
|Resolution: 8, 16  [ParaAdulto(Simpsons), ~ParaAdulto(Simpsons)], subst={},
renaming={}              |
|18   | [Answer0(Juan)]
|Resolution: 7, 17  [DibujoAnimado(Simpsons), ~DibujoAnimado(Simpsons)],
subst={}, renaming={}        |
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```