**Difference between Relational Algebra and Relational Calculus**

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| **S. No** | **Relational Algebra** | **Relational Calculus** |
| 1. | It is a Procedural language. | While Relational Calculus is Declarative language. |
| 2. | Relational Algebra means how to obtain the result. | While Relational Calculus means what result we have to obtain. |
| 3. | In Relational Algebra, the order is specified in which the operations have to be performed. | While in Relational Calculus, the order is not specified. |
| 4. | Relational Algebra is independent on domain. | While Relation Calculus can be a domain dependent. |
| 5. | Relational Algebra is nearer to a programming language. | While Relational Calculus is not nearer to programming language. |

**Difference between Tuple Relational Calculus (TRC) and Domain Relational Calculus (DRC)**

| **Tuple Relational Calculus (TRC)** | **Domain Relational Calculus (DRC)** |
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| In TRS, the variables represent the tuples from specified relation. | In DRS, the variables represent the value drawn from specified domain. |
| A tuple is a single element of relation. In database term, it is a row. | A domain is equivalent to column data type and any constraints on value of data. |
| In this filtering variable uses tuple of relation. | In this filtering is done based on the domain of attributes. |
| Notation: {T | P (T)} or {T | Condition (T)} | Notation: { a1, a2, a3, …, an | P (a1, a2, a3, …, an)} |
| Example: {T | EMPLOYEE (T) AND T.DEPT\_ID = 10} | Example: { | < EMPLOYEE > DEPT\_ID = 10 } |