

CSCB20 - Assignment 1

sharanshangar

February 2021

1 Relational Algebra

1.	Scheme		
	Suppliers	Parts	Catalog
	Sid	pid	sid
	sname	pname	pid
	address	colour	cost

- (a)
- Finds all the names of suppliers who sell red products that cost less than \$100.
 - Will be an empty column. Since the first operations (the σ s and \bowtie s) isolate the red parts that cost less than \$100 and combines them. This is then joined with the supplier list. After this the column of the sid is isolated. Since sid is not the same as sname, the last projection will produce a blank relation.
 - Finds the name of suppliers that sell both green and red items that cost less than \$100.
 - Finds the i.d of suppliers that sell both green and red items that cost less than \$100.
 - Finds the name of suppliers that sell both green and red items that cost less than \$100.