**Write down the following in relational algebra:**

1. **Show the employee (name) and the department (name) the employee works at**

π Employee.name, Department.name σ Department.ID = Employee.DID (Department x Employee)

1. **Show the employee (name) and the project (name) the employee works on**

π Employee.name, Project.name σ Employee.EID = ProjectEmployee.EID /\ ProjectEmployee.PID = Project.PID (Employee x ProjectEmployee x Project)

1. **Show that which projects (name) the employees of the department called “DPN” work on?**

π Project.name σ PID (Project) IN (π PID σ EID (ProjectEmployee) = (π EID σ DID (Employee) = (π DID σ name (Department) = "DPN")));

1. **Which projects (name) the employee called “John” works on?**

π Project.name σ PID (Project) = (π PID σ EID (ProjectEmployee) = (π EID σ name = "Tommy"(Employee)));

1. **Who (name) works on the project called “PRN”?**

π Employee.name σ EID (Employee) IN (π EID σ PID (ProjectEmployee) = (π PID σ name (Project) = " PRN "));

1. **Who (name) DOES NOT work on the project called “PRN”?**

π Employee.name σ EID (Employee) NOT IN (π EID σ PID (ProjectEmployee) = (π PID σ name (Project) = " PRN "));