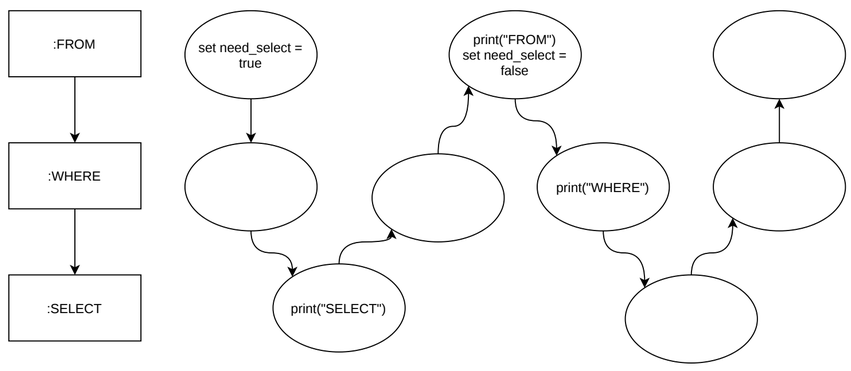
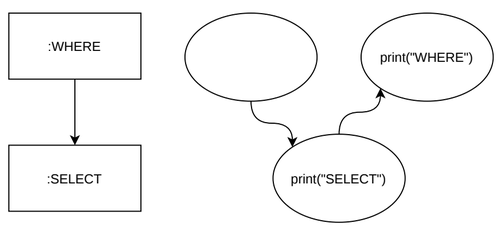
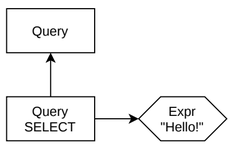

:FROM
:WHERE
:SELECT
set need_select = true
print("SELECT")
print("FROM")
set need_select = false
print("WHERE")


:WHERE
:SELECT
print("SELECT")
print("WHERE")

```
SELECT "Hello World!"
```

```
sql_select("Hello World!")
sql_query() |> sql_select("Hello World!")
```

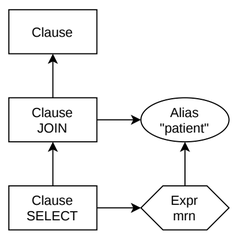



```
SELECT p.mrn FROM patient p
```

```
p = sql_alias("patient")
sql_join(p) |> sql_select(p.mrn)
```

```
p = sql_alias("patient")
p |> sql_select(p.mrn)
```

```
(p = sql_from("patient")) |> sql_select(p.mrn)
```



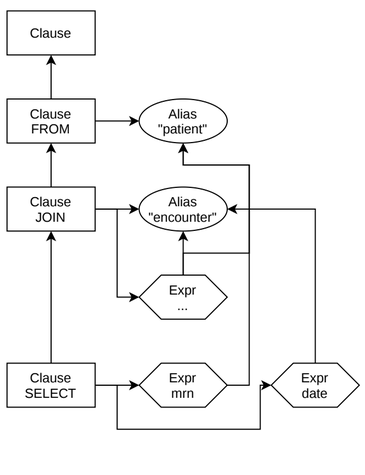

```
SELECT p.mrn, e.date
FROM patient p
JOIN encounter e ON (p.id = e.patient_id)
```

```
p = sql_alias("patient")
e = sql_alias("encounter")
sql_from(p) |> sql_join(e, p.id .== e.patient_id) |> sql_select(p.mrn, e.date)
```

```
p = sql_alias(catalog["public"]["patient"])
e = sql_alias(catalog["public"]["encounter"])
sql_from(p) |> sql_join(e, autojoin=p) |> sql_select(p.mrn, e.date)
```

```
p = sql_alias("patient")
e = sql_alias("encounter")
p |> sql_join(e, p.id .== e.patient_id) |> sql_select(p.mrn, e.date)
```

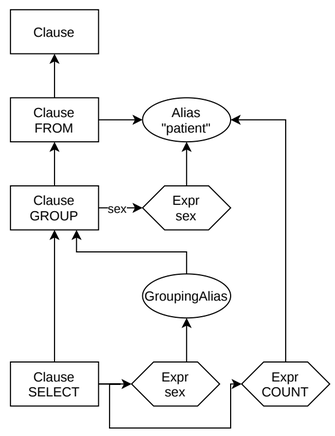
```
p = sql_alias("patient")
e = sql_alias("encounter")
sql_from(p) |> sql_join(e, p.id .== e.patient_id) |> sql_select(p.mrn) |> sql_select(e.date)
```




```
SELECT p.sex, COUNT(p)
FROM patient p
GROUP BY p.sex
```

```
p = sql_alias("patient")
g = sql_from(p) |> sql_group(sex = p.sex)
g |> sql_select(g.sex, sql_count(p))
```

```
p = From("patient")
g = Group(p, sex = p.sex)
Select(g, g.sex, Count(p))
```




```
SELECT p.mrn, COALESCE(g.n_e, 0)
FROM patient p
LEFT JOIN (
   SELECT e.patient_id, COUNT(e) AS n_e
   FROM encounter e
   GROUP BY e.patient_id) g ON (p.id = g.patient_id)
```

```
p = From("patient")
e = From("encounter")
g = Group(e, patient_id = e.patient_id)
j = LeftJoin(p, g, p.id .== g.patient_id, omit_if_unused=true)
Select(j, p.mrn, Coalesce(Count(e), 0))
```

```
SELECT p.mrn
FROM patient p
WHERE p.sex = 'male'
```

```
p = From("patient")
w = Where(p, p.sex .== "male")
Select(w, p.mrn)
```

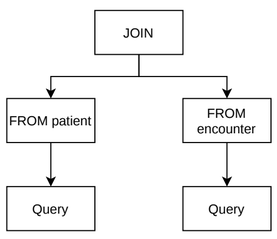
```
p = From("patient", columns=["mrn", "sex"])
w = Where(p, Ref(1, 2) .== "male", select=[Ref(1,1)])
Select(w, select=[Ref(1,1)])
```

```
SELECT p.mrn, e.date
FROM patient p
JOIN encounter e ON (p.id = e.patient_id)
```

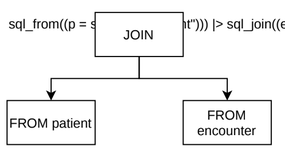
```
p = From("patient")
e = From("encounter")
g = Group(e, patient_id = e.patient_id)
gs = Select(g, patient_id = g.patient_id, n = Count(e))
j = LeftJoin(p, gs, p.id .== gs.patient_id)
Select(j, p.mrn, Coalesce(gs.n, 0))
```

```
patient_tbl = Table("patient", [("id", Int), ("sex", String), ("mrn", String)])
encounter_tbl = Table("encounter", [("id", Int), ("patient_id", Int), ("date", Date)])

auto_connect!(patient_tbl, encounter_tbl, [("id", "patient_id")])

p = From(patient_tbl)
e = From(encounter_tbl)
j = LeftJoin(p, e)
Select(j, p.mrn, e.date)
```

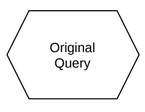
```
p = From("patient")
e = From("encounter")
j = Join(p, e, p.id .== e.patient_id)
Select(j, p.mrn, e.date)
```




```
sql_from((p = s                    t"))) |> sql_join((e = sql_alias("encounter")), p.id .== e.patient_id) |> sql_select(p.mrn, e.date)
```



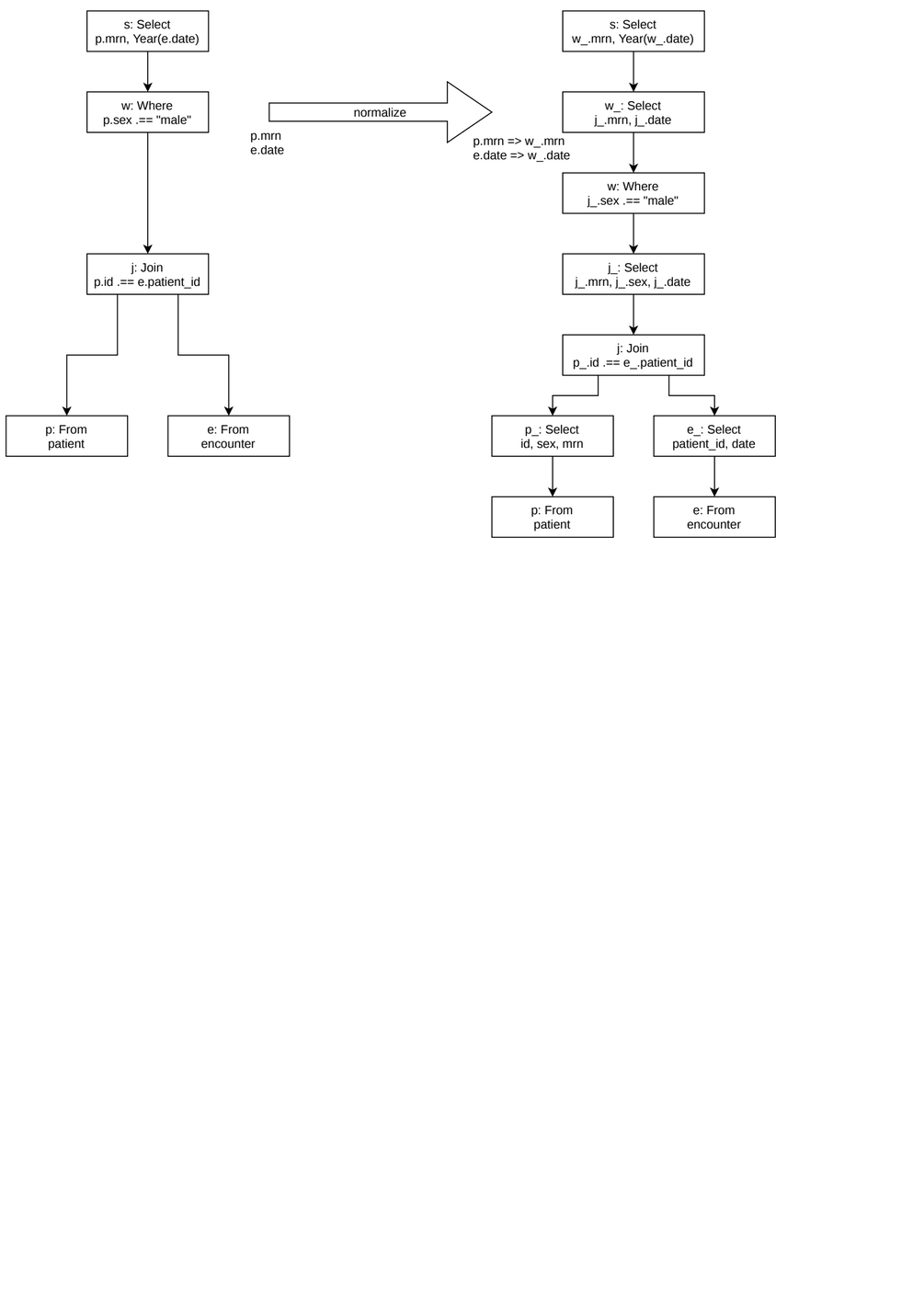

```
p = From("patient")
e = From("encounter")
g = Group(e, patient_id = e.patient_id, summarize=(; n = Count(e)))
j = LeftJoin(p, g, p.id .== g.patient_id)
Select(j, p.mrn, Coalesce(g.n, 0))
```



```
SELECT p.mrn, EXTRACT(YEAR FROM e.date)
FROM patient p
JOIN encounter e
ON (p.id = e.patient_id)
WHERE p.sex = 'male'
```

```
p = From(patient)
e = From(encounter)
j = Join(p, e, p.id .== e.patient_id)
w = Where(j, p.sex .== "male")
s = Select(w, mrn = p.mrn, year = Year(e.date))
```

```
p = From(patient)
p_ = Select(p, _id = Const(:id), _sex = Const(:sex), _mrn = Const(:mrn))
e = From(encounter)
e_ = Select(e, _patient_id = Const(:patient_id), _date = Const(:date))
j = Join(p_, e_, p_._id .== e_._patient_id)
j_ = Select(j, _mrn = p_._mrn, _sex = p_._sex, _date = e_._date)
w = Where(j_, j_._sex .== "male")
w_ = Select(w, _mrn = j_._mrn, _date = j_._date)
s = Select(w_, mrn = w_._mrn, year = Year(w_._date))
```



```
SELECT c.person_id, c.peer_id, c.timestamp, c.distance
FROM contact c
```

For each pair of persons, find the contact interval when there were detected at least once in a minute in a distance of less than 5 meters.