SQL

1a/

```
Select tenDA from DUAN
where kinh phi < 10 000 000
```

1b/

```
Select maNV from PHANCONG
where maDA like 'TH01'
```

```
Select NHANVIEN.MaNV, tenNV, dia chi
from NHANVIEN, PHANCONG
where NHANVIEN.maNV = PHANCONG.MaNV
and NHANVIEN.maNV in (select maNV from
PHANCONG where maDA like 'TH01') and NHANVIEN.maNV
in (select maNV from PHANCONG where maDA like
'TH02')
```

1c/

```
select NHANVIEN.maNV, hoten, tenphong
from NHANVIEN, PHANCONG, DUAN, PHONGBAN
where NHANVIEN.maPhong = PHONGBAN.maPhong and
NHANVIEN.maNV = DUAN.MaNV and NhanVIEN.maNV =
PHANCONG.maNV and diadiem like N'Hà Nội' and
year(ngayBD) like year '2019' and year (ngay KT) like '2019'
```

2a/

Select maLOP tenLop from LOP
where HOCPHI > 10 000 000

2b/

Select DANGKY.MALOP from DANGKY, HOCVIEN
where DANGKY.maHV = HOCVIEN.maHV
and HOCVIEN.Hoten like N'Nguyễn Duy Minh'
and year(NGAY DK) like '2019' and month (ngay DK)
like '7'

2c/

Select hoten from GIAOVIEN, LOP
where LOP.maGV = GIAOVIEN.maGV
and namHoc like '2024'.

Đại số quan hệ

1a/

$$\Pi_{tenDA} (\sigma_{kinhPhi < 10\,000\,000} (DUAN))$$

1b/

$KQ \leftarrow \Pi$ NHANVIEN.MaNV, tenNV, diachi $(\sigma_{NHANVIEN.MaNV = PHANCONG.MaN...}$

$\wedge$ NHANVIEN.MaNV $\wedge$ R1 $\wedge$ NHANVIEN.MaNV AR2

* bổ sung 1b/

$R_1 \leftarrow \Pi_{maNV} (\delta_{maDA = 'THO1'} (PHANCONG))$

$R_2 \leftarrow \Pi_{maNV} (\delta_{maDA = 'THO2'} (PHANCONG))$

1c/

$\Pi_{NHANVIEN.MaNV, hoten, tenphong} (\delta_{NhanVien.MaPhong = PHONGBA}$
$\qquad maPh$

$\wedge NHANVIEN.maNV = DUAN.MaNV \wedge NHANVIEN.maNV = PHANCONG.Ma$

$\wedge diadiem = N'Hà Nội' \wedge year(ngayBD) = '2019'$

$\wedge year(ngayHT) = '2019' (NHANVIEN, PHONGBAN, PHANCONG$

$DUAN))$

2a/

$\Pi_{tenLop} (\delta_{HGCPHI > 10000000} (LOP))$

2b/

$$\Pi_{DANGKY.MaLOP} (\sigma_{DANGKY.maHV = HOCVIEN.maHV \land HOCVIEN.hoten = 'Nguyễn Duy Minh' \land year(ngayDK) = '2019' \land month(ngayKT) = '7'} (DANGKY, HOCVIEN))$$

2c.

$$\Pi_{hoten} (\sigma_{lop.maGV = GIAOVIEN.maGV \land namhoc = '2024'} (GIAOVIEN, LOP))$$