

Restricting and Sorting Data

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Working with the EHR dataset

– Datamart EHR

- Table encounter lists all the patient's visits.
- All information is specific to a hospital visit
- For years 2015, 2016
- Enc_id is unique identifier for an encounter.
- Also hosp_id (hospital Id), pat_id (Patient Id), pay_id (Payer Id), age, admission_dt, discharge_dt

Where Clause; Distinct Clause;

– SQL code

```
select distinct age from encounter
```

```
select * from encounter where age >= 50
```

Unordered Data; The Order By Clause

– SQL code

```
select *  
  from encounter order by age
```

```
select *  
  from encounter order by admission_dt
```

```
select *  
  from hospital order by census_reg
```

Reversing the order; Sorting Null

– SQL code

```
select distinct age
  from encounter
 order by age desc
```

```
select distinct census_reg
  from hospital
 order by census_reg desc
```

```
select distinct census_reg
  from hospital
 order by census_reg nulls first
```

Custom Sorting; Aliases

– SQL code

```
select distinct census_reg from hospital
order by case
  when census_reg = 'West' then 1
  else 2
end, census_reg
```

```
select t.*,
  case
    when census_reg = 'West' then 1
    else 2
  end custom_sort
from hospital t
order by custom_sort, census_reg
```

Top-N Queries; Rownum;

– SQL code

```
select *  
  from encounter where rownum <=3 order by age
```

```
select * from (  
  select *  
    from encounter t  
   order by age desc  
 )  
where rownum <= 3
```

```
select * from hospital  
order by census_reg  
fetch first 3 rows only
```

The BETWEEN & IN Operator;

– SQL code

```
select *  
  from encounter where age between 18 and 70
```

```
select *  
  from encounter where age in (18,70)
```


The LIKE Operator; IS (NOT) NULL Conditions; Logical Operators

– SQL code

```
select census_reg, bed_size,  
       rural_urban, acute_nonacute  
from hospital where census_reg is null
```

```
select census_reg, bed_size,  
       rural_urban, acute_nonacute  
from hospital where census_reg like 'We%'
```

```
select teaching_ind, census_reg,  
       bed_size, rural_urban, acute_nonacute  
from hospital  
where teaching_ind=1 and census_reg is not null
```

Your homework

- Access table `patient_type` in EHR datamart
 - Table `patient_type` has 2 fields
 - `Pat_type_id` (Patient Type Id)
 - `Pat_type_desc` (Patient Type Desc)
 - Read all the fields and all the records
 - Order all the fields by `Pat_type_desc`
 - Select all fields where `Pat_type_desc` starts with 'Inp'
 - Select first four rows from the table
 - Put your code and the output in a single PDF file