

**Учебная дисциплина:**

**Информационное обеспечение систем  
управления**

**Лабораторные работы. Раздел 5**

**Сафронов А.И.**

# Готовые запросы

## Запрос 5 – Общий

```
SELECT $VAR$ AS VAR_ID, $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZO UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE ID_UOL = $UOL$ AND VAR_ID = $VAR$) AND UL.VAR_ID = $VAR$  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №1

```
SELECT $VAR$ AS VAR_ID, $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZO UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE ID_UOL = 5106 AND VAR_ID = 2014122418204663) AND UL.VAR_ID = 2014122418204663  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №2

```
SELECT $VAR$ AS VAR_ID, $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE ID_UOL = 5104 AND VAR_ID = 2015011310571472) AND UL.VAR_ID = 2015011310571472  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №3

```
SELECT $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN ( SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE ID_UOL = 6304 )  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №4

```
SELECT $VAR$ AS VAR_ID, $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE VAR_ID = 12014) AND UL.VAR_ID = 12014  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №5

```
SELECT $VAR$ AS VAR_ID, $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE ID_UOL = 5125 AND VAR_ID = 2016021009054736) AND UL.VAR_ID = 2016021009054736  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №6

```
SELECT $UOL$ AS ID_UOL,  
        CASE WHEN UL.ID_PREDPR IS NULL THEN '9999'  
        ELSE UL.ID_PREDPR END AS PR_ED_PR,  
        S.OBJECT_ID, S.STVN,  
        CASE WHEN UL.PRC IS NULL THEN '9999'  
        ELSE UL.PRC END AS PRC,  
        S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
        UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN ( SELECT ID_URLB  
        FROM DNCDL.URLB_OSN  
        WHERE ID_UOL = 6304 )  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №7

```
SELECT 2014031115053854 AS ID_URLB, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
        CASE WHEN UL.PRC IS NULL THEN '0'  
        ELSE UL.PRC END AS PRC,  
        S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
        UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN ( SELECT ID_URLB  
        FROM DNCDL.URLB_OSN  
        WHERE ID_URLB = 2014031115053854 )  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №8

```
SELECT $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN ( SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE ID_UOL = 6304 ) AND NOT UL.ID_PREDPR IS NULL  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №9

```
SELECT $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE ID_UOL = 9633 AND VAR_ID = 2014122005015204) OR UL.VAR_ID = 2016012701124690  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №10

```
SELECT UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
        CASE WHEN UL.PRC IS NULL THEN '0'  
        ELSE UL.PRC END AS PRC,  
        S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
        UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
        FROM DNCDL.URLB_OSN  
        WHERE VAR_ID = 2014122418204663)  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №11

```
SELECT UP.*, S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK
FROM DNCDL.URLB_POEZD UP
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND
    UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID
WHERE UP.ID_URLB IN ( SELECT ID_URLB
    FROM DNCDL.URLB_OSN
    WHERE ID_UOL = 9610 AND VAR_ID = 962014) AND UL.VAR_ID = 962014
```

# Готовые запросы

## Запрос 5 – Вариант №12

```
SELECT UP.VAR_ID, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
        CASE WHEN UL.PRC IS NULL THEN '0'  
        ELSE UL.PRC END AS PRC,  
        S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
        UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
        FROM DNCDL.URLB_OSN  
        WHERE NOT OP_ST_1_F IS NULL) AND S.STVN > 3  
  
GROUP BY UP.VAR_ID, UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №13

```
SELECT $VAR$ AS VAR_ID, $UOL$ AS ID_UOL, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE ID_UOL = 103 AND VAR_ID = 12014) AND UL.VAR_ID = 12014  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №14

```
SELECT $VAR$ AS VAR_ID, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
      CASE WHEN UL.PRC IS NULL THEN '0'  
      ELSE UL.PRC END AS PRC,  
      S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZD UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
      UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
      FROM DNCDL.URLB_OSN  
      WHERE VAR_ID = 12014) AND UL.VAR_ID = 12014  
  
GROUP BY UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```

# Готовые запросы

## Запрос 5 – Вариант №15

```
SELECT UP.VAR_ID, UL.ID_PREDPR, S.OBJECT_ID, S.STVN,  
        CASE WHEN UL.PRC IS NULL THEN '0'  
        ELSE UL.PRC END AS PRC,  
        S.FULL_NAME||'('||S.STVN||' сек.)' AS FULL_NAME, S.OBJECT_ID||'_'||S.STVN AS ID_LOK  
  
FROM DNCDL.URLB_POEZO UP  
  
JOIN DNNSI.SOST S ON UP.OBJECT_ID = S.OBJECT_ID AND UP.SOSTAVN = S.STVN  
  
JOIN DNCDL.URLB_OSN UO ON UP.ID_URLB = UO.ID_URLB AND UP.VAR_ID = UO.VAR_ID  
  
LEFT JOIN DNCDL.UOL_LOK UL ON UO.ID_UOL = UL.ID_UOL AND UP.SOSTAVN = UL.STVN AND  
        UP.OBJECT_ID = UL.OBJECT_ID AND UO.VAR_ID = UL.VAR_ID  
  
WHERE UP.ID_URLB IN (SELECT ID_URLB  
        FROM DNCDL.URLB_OSN  
        WHERE NOT NA_DV IS NULL) AND S.STVN = 3 AND UL.PRC < 100  
  
GROUP BY UP.VAR_ID, UP.OBJECT_ID, UP.SOSTAVN, S.FULL_NAME, S.STVN, S.OBJECT_ID, UL.PRC, UL.ID_PREDPR
```