

## SIMPLE ABAP PROGRAM (SAP)

One of main job of an ABAP-er is create **ABAP** report. Report content 4 basic component:

1. Data declaration.
2. Selection screen.
3. Select Data.
4. Write Report.

I assume you already familiar with **data dictionary**. For an example, we have a table "SFLIGHT", with following fields:

1. **CARRID** (Airline carrier ID)
2. **CONNID** (Flight connection Id)
3. **FLDATE** (Flight date).
4. **SEATSMAX** (Maximum capacity).

We wan to create a report that can be filtered based on Airline carrier ID and Flight connection Id.

Go to transaction code **SE38** (SAP Menu->Tools>ABAP Workbench->Development->ABAP Editor), enter program name with prefix Z, for example **ZTEST0001**, then choose "Create" button.



Then, enter title for program, and choose 1 "Executable Program" for program type. If screen input for development class appear, click "Local Object".

Then, go to following steps.

## 1. DATA DECLARATION

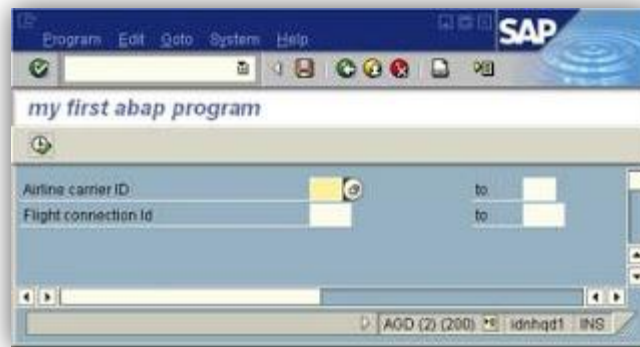
TABLES: sflight.

```
DATA: BEGIN OF t_report OCCURS 3,
carrid LIKE sflight-carrid,
connid LIKE sflight-connid,
fldate LIKE sflight-fldate,
seatsmax LIKE sflight-seatsmax,
END OF t_report.
```

## 2. SELECTION SCREEN

```
SELECT-OPTIONS s_carrid FOR sflight-carrid.
SELECT-OPTIONS s_connid FOR sflight-connid.
```

It will generate selection screen like picture below.



## 3. SELECT DATA

```
SELECT * FROM sflight
WHERE carrid IN s_carrid AND
connid IN s_connid.
t_report-carrid = sflight-carrid.
t_report-connid = sflight-connid.
t_report-fldate = sflight-fldate.
t_report-seatsmax = sflight-seatsmax.
APPEND t_report.
ENDSELECT.
IF sy-subrc NE 0. "sy-subrc = return code
WRITE 'Data not found'.
ENDIF.
```

## 4. WRITE DATA

LOOP AT t\_report.

"comment: Go to next line  
skip.

```
WRITE t_report-carrid.  
WRITE t_report-connid.  
WRITE t_report-fldate.  
WRITE t_report-seatsmax.  
ENDLOOP.
```

The result:



The screenshot shows the SAP ABAP program output window titled "my first abap program". The output displays a list of flight records with columns for flight type (LH or SQ), flight number, departure date, and seatsmax. The records are as follows:

Flight Type	Flight Number	Departure Date	Seatsmax
LH	8400	28.02.1995	350
LH	8454	17.11.1995	350
LH	8455	06.06.1995	220
LH	3577	28.04.1995	220
SQ	8026	28.02.1995	380

Here is the complete program:

```
REPORT ZTEST0001 .  
*Data Declaration  
tables: sflight.
```

```
DATA: BEGIN OF t_report OCCURS 3,  
carrid LIKE sflight-carrid,  
connid LIKE sflight-connid,  
fldate LIKE sflight-fldate,  
seatsmax LIKE sflight-seatsmax,  
END OF t_report.
```

\*Selection Screen

```
SELECT-OPTIONS s_carrid FOR sflight-carrid.  
SELECT-OPTIONS s_connid FOR sflight-connid.
```

\*Get Data

```
SELECT * FROM sflight  
WHERE carrid IN s_carrid AND  
connid IN s_connid.  
t_report-carrid = sflight-carrid.  
t_report-connid = sflight-connid.  
t_report-fldate = sflight-fldate.  
t_report-seatsmax = sflight-seatsmax.  
APPEND t_report.  
ENDSELECT.  
IF sy-subrc NE 0.  
WRITE 'Data not found'.  
ENDIF.
```

\*Write Data

```
LOOP AT t_report.  
skip. "comment:Go to next line  
WRITE t_report-carrid.  
WRITE t_report-connid.  
WRITE t_report-fldate.  
WRITE t_report-seatsmax.  
ENDLOOP.
```