# Exercise 10D –Create ABAP Class

| SAP Partner Workshop | 10 min |
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## Description

In this exercise, you'll learn how:

- Create a ABAP class.

**Prerequisites**

- You have completed the steps mentioned until Exercise 10C.

## Target group

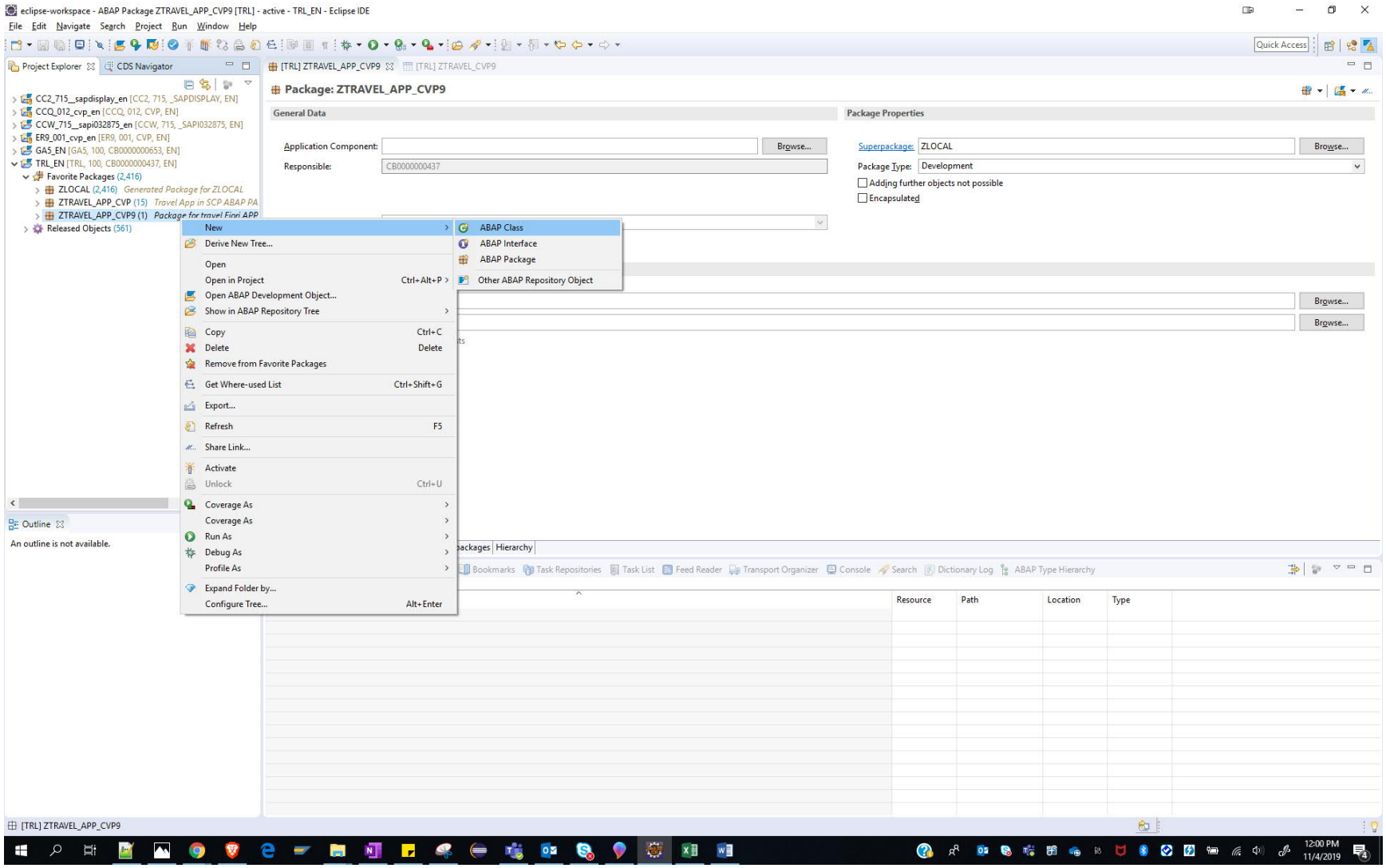
- Developers
- People interested in learning about development in ABAP env in SAP Cloud Platform with focus on RAP model.

## Goal

The goal of this exercise is to create an ABAP class which is used to generate data.

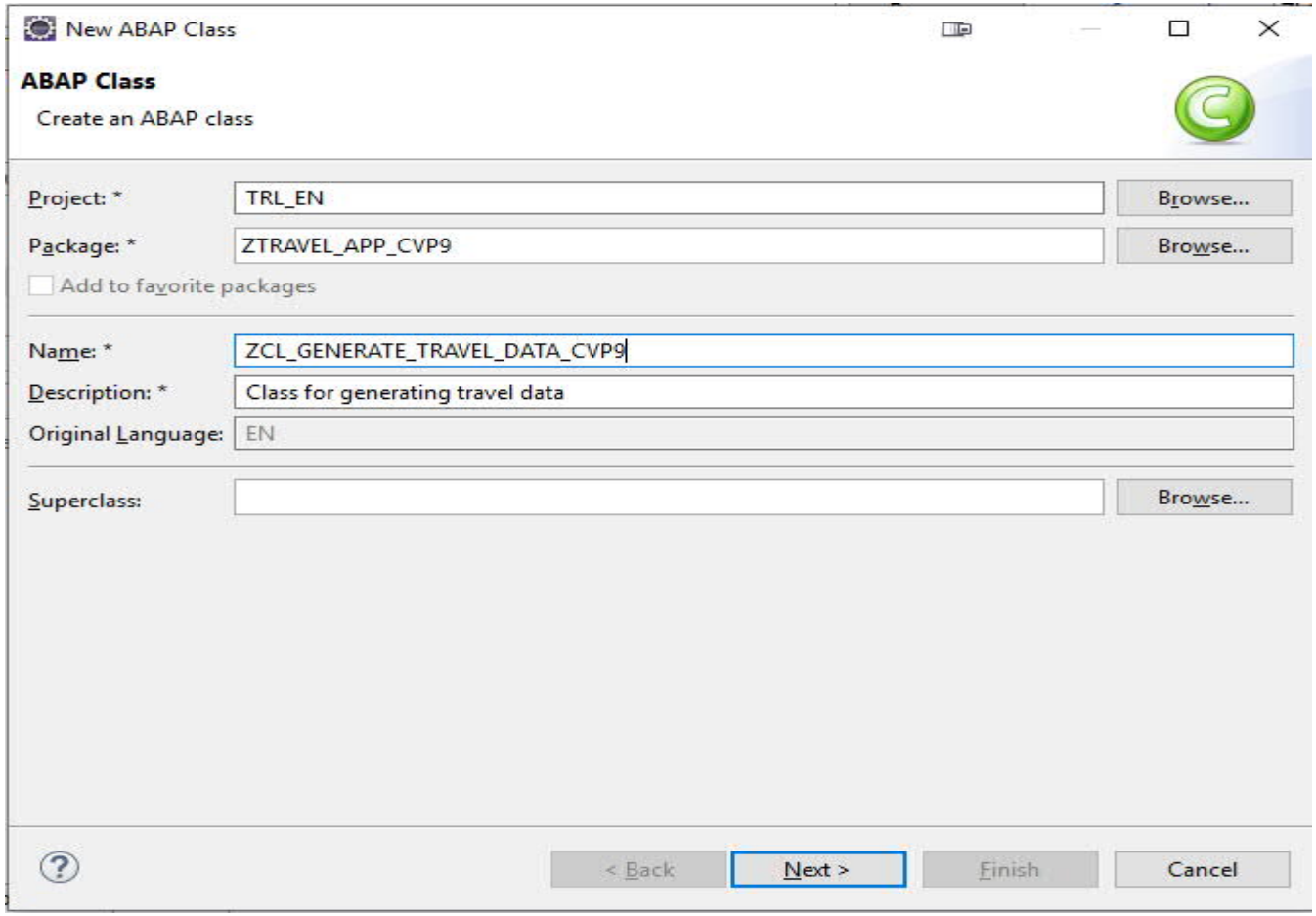
Data generated will be used in the following exercises.

Select the Package ZTRAVEL_APP_XXX, right click → New → ABAP class,



Enter the name and description as

- Name: `ZCL_GENERATE_TRAVEL_DATA_XXX`
- Description: `Class for generating travel data`



Click on Finish.

Add the following code in the Editor.

```
CLASS zcl_generate_travel_data_xxx DEFINITION
 PUBLIC
 FINAL
 CREATE PUBLIC .

 PUBLIC SECTION.
   INTERFACES if_oo_adt_classrun.
 PROTECTED SECTION.
 PRIVATE SECTION.
ENDCLASS.
```

```
CLASS ZCL_GENERATE_TRAVEL_DATA_XXX IMPLEMENTATION.


 METHOD if_oo_adt_classrun~main.

   DATA:itab TYPE TABLE OF ztravel_xxx.


*   read current timestamp

   GET TIME STAMP FIELD DATA(zv_tsl).


*   fill internal travel table (itab)

   itab = VALUE #(

 ( travel_id = '00000001' agency_id = '070001' customer_id = '000077' begin_date = '20190624' end_date = '20190628'
booking_fee = '60.00' total_price =  '1780.00' currency_code = 'USD'
   description = 'Trip to Thailand PowerWeek in Bangkok ' overall_status = 'A' created_by = 'CVP' created_at =
'20190612133945.5960060' last_changed_by = 'CVP' last_changed_at = '20190702105400.3647680'  )
 ( travel_id = '00000002' agency_id = '070005' customer_id = '000005' begin_date = '20190613' end_date = '20190716'
booking_fee = '55.00' total_price = '1150.00' currency_code = 'USD'
   description = 'Trip to TechED in Bangalore' overall_status = 'A' created_by = 'CVP' created_at =
'20190613111129.2391370' last_changed_by = 'CVP' last_changed_at = '20190711140753.1472620' )
 ( travel_id = '00000003' agency_id = '070010' customer_id = '000011' begin_date = '20190610' end_date = '20190714'
booking_fee = '61.00' total_price = '1800.00' currency_code = 'USD'
   description = 'Trip to Sapphire in Orlando' overall_status = 'X' created_by = 'CVP' created_at =
'20190613105654.4296640' last_changed_by = 'CVP' last_changed_at = '20190613111041.2251330' )
   ( travel_id = '00000004' agency_id = '070010' customer_id = '000011' begin_date = '20190610' end_date = '20190714'
booking_fee = '120.00' total_price = '2800.00' currency_code = 'USD'
   description = 'Trip to DSAG Berlin' overall_status = 'X' created_by = 'CVP' created_at = '20190613105654.4296640'
last_changed_by = 'CVP' last_changed_at = '20190613111041.2251330' )
```

```
   ( travel_id = '00000005' agency_id = '070010' customer_id = '000011' begin_date = '20190610' end_date = '20190714'
booking_fee = '155.00' total_price = '3500.00' currency_code = 'USD'

   description = 'Trip to ASUG Orlando' overall_status = 'A' created_by = 'CVP' created_at =
'20190613105654.4296640' last_changed_by = 'CVP' last_changed_at = '20190613111041.2251330' )

).
```

* delete existing entries in the database table

```
DELETE FROM ztravel_xxx.
```

* insert the new table entries

```
INSERT ztravel_xxx FROM TABLE @itab.
```

* check the result

```
SELECT * FROM ztravel_xxx INTO TABLE @itab.

out->write( sy-dbcnt ).

out->write( 'Travel data inserted successfully!').
```

```
ENDMETHOD.
```

ENDCLASS.

Please make sure to replace XXX with the name which was chosen by you during the creation of DB table. This replacement in necessary in most of the following exercises.

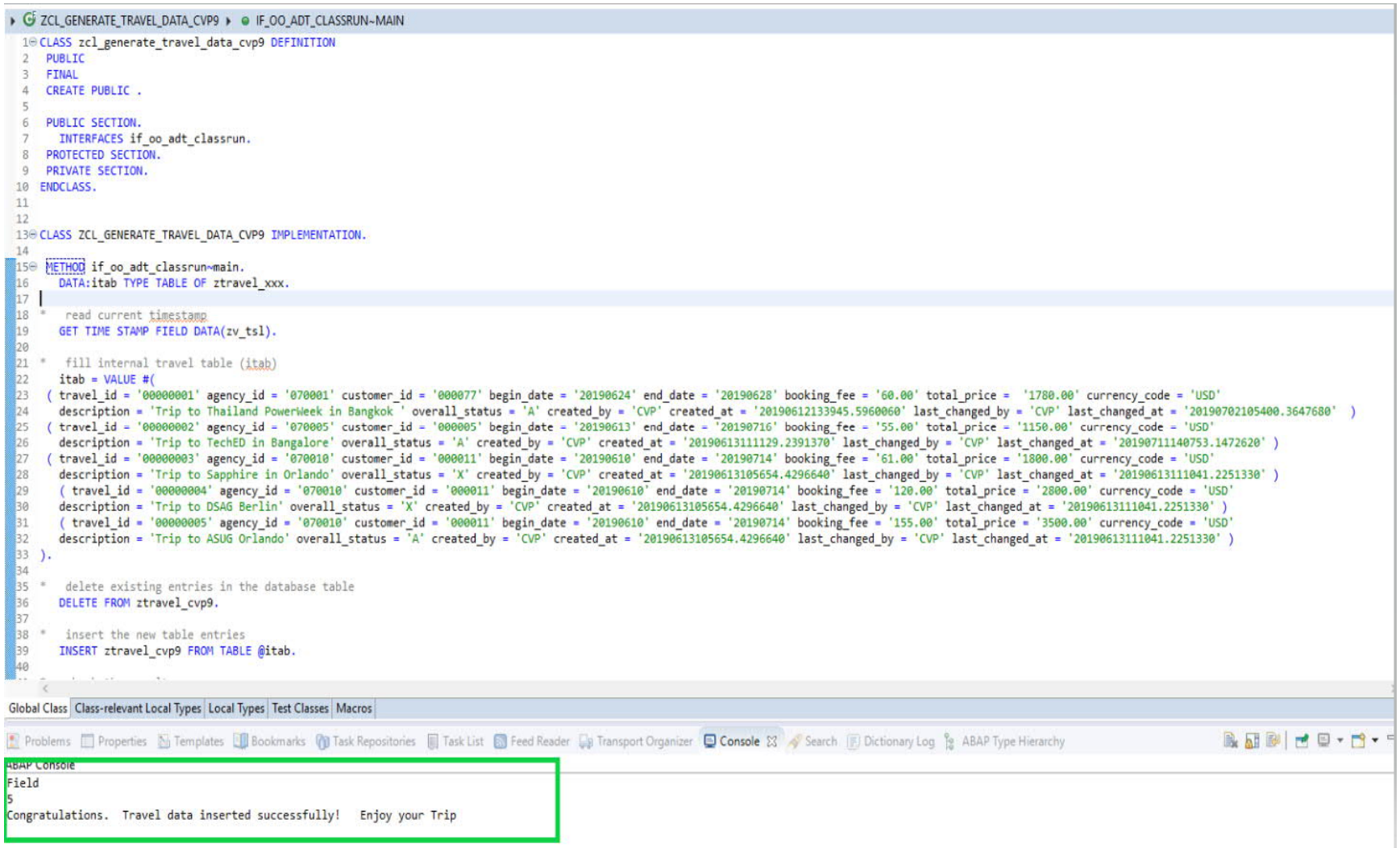
Example:

```
CLASS zcl_generate_travel_data_cvp9 DEFINITION
 PUBLIC
 FINAL
 CREATE PUBLIC .

 PUBLIC SECTION.
   INTERFACES if_oo_adt_classrun.
 PROTECTED SECTION.
 PRIVATE SECTION.
ENDCLASS.


CLASS ZCL_GENERATE_TRAVEL_DATA_CVP9 IMPLEMENTATION.

 METHOD if_oo_adt_classrun~main.
   DATA:itab TYPE TABLE OF ztravel_xxx.

*   read current timestamp
   GET TIME STAMP FIELD DATA(zv_tsl).

*   fill internal travel table (itab)
   itab = VALUE #(
 ( travel_id = '00000001' agency_id = '070001' customer_id = '000077' begin_date = '20190624' end_date = '20190628'
booking_fee = '60.00' total_price =  '1780.00' currency_code = 'USD'
```

```
   description = 'Trip to Thailand PowerWeek in Bangkok ' overall_status = 'A' created_by = 'CVP' created_at =
'20190612133945.5960060' last_changed_by = 'CVP' last_changed_at = '20190702105400.3647680'  )
 ( travel_id = '00000002' agency_id = '070005' customer_id = '000005' begin_date = '20190613' end_date = '20190716'
booking_fee = '55.00' total_price = '1150.00' currency_code = 'USD'
   description = 'Trip to TechED in Bangalore' overall_status = 'A' created_by = 'CVP' created_at =
'20190613111129.2391370' last_changed_by = 'CVP' last_changed_at = '20190711140753.1472620' )
 ( travel_id = '00000003' agency_id = '070010' customer_id = '000011' begin_date = '20190610' end_date = '20190714'
booking_fee = '61.00' total_price = '1800.00' currency_code = 'USD'
   description = 'Trip to Sapphire in Orlando' overall_status = 'X' created_by = 'CVP' created_at =
'20190613105654.4296640' last_changed_by = 'CVP' last_changed_at = '20190613111041.2251330' )
   ( travel_id = '00000004' agency_id = '070010' customer_id = '000011' begin_date = '20190610' end_date = '20190714'
booking_fee = '120.00' total_price = '2800.00' currency_code = 'USD'
   description = 'Trip to DSAG Berlin' overall_status = 'X' created_by = 'CVP' created_at = '20190613105654.4296640'
last_changed_by = 'CVP' last_changed_at = '20190613111041.2251330' )
   ( travel_id = '00000005' agency_id = '070010' customer_id = '000011' begin_date = '20190610' end_date = '20190714'
booking_fee = '155.00' total_price = '3500.00' currency_code = 'USD'
   description = 'Trip to ASUG Orlando' overall_status = 'A' created_by = 'CVP' created_at = '20190613105654.4296640'
last_changed_by = 'CVP' last_changed_at = '20190613111041.2251330' )
).

*   delete existing entries in the database table
   DELETE FROM ztravel_cvp9.

*   insert the new table entries
   INSERT ztravel_cvp9 FROM TABLE @itab.

*   check the result
   SELECT * FROM ztravel_cvp9 INTO TABLE @itab.
   out->write( sy-dbcnt ).
   out->write( 'Congratulations.  Travel data inserted successfully!   Enjoy your Trip ').

 ENDMETHOD.
ENDCLASS.
```

Use Ctrl-S for Save and Ctrl-F3 for activation.

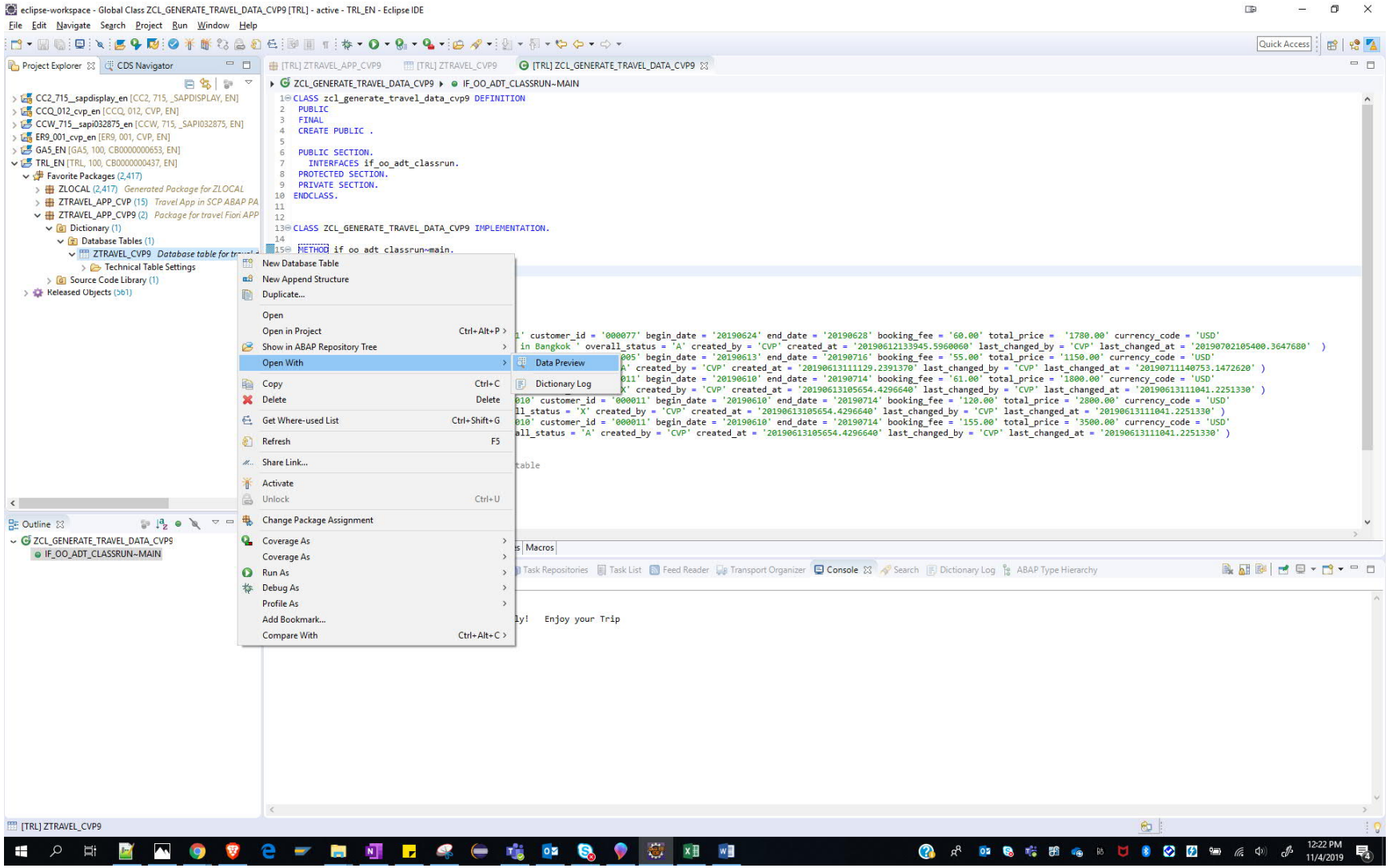
Use F9 to run the class.



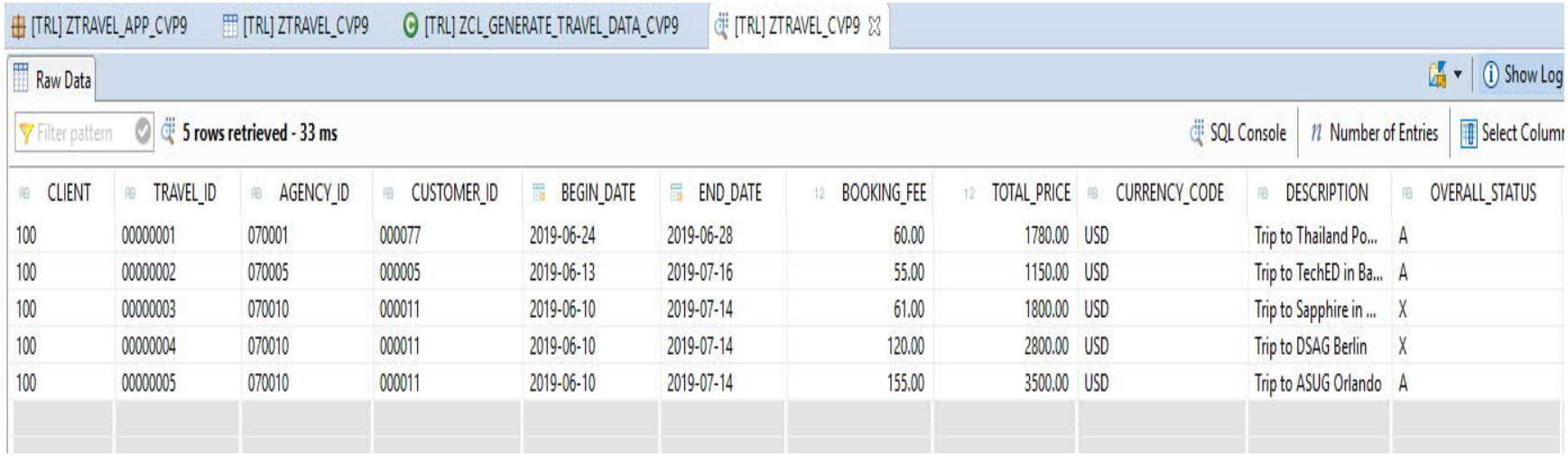

Let’s verify the data that was successfully inserted in the table.

Expand “Dictionary” under the package ZTRAVEL_APP_XXX.

Right on the table name → Open With → Data Preview.



You should see the data inserted.


[TRL] ZTRAVEL_APP_CVP9 | [TRL] ZTRAVEL_CVP9 | [TRL] ZCL_GENERATE_TRAVEL_DATA_CVP9 | [TRL] ZTRAVEL_CVP9

Raw Data | Show Log

Filter pattern | 5 rows retrieved - 33 ms | SQL Console | Number of Entries | Select Columr

| CLIENT | TRAVEL_ID | AGENCY_ID | CUSTOMER_ID | BEGIN_DATE | END_DATE | BOOKING_FEE | TOTAL_PRICE | CURRENCY_CODE | DESCRIPTION | OVERALL_STATUS |
|---|---|---|---|---|---|---|---|---|---|---|
| 100 | 00000001 | 070001 | 000077 | 2019-06-24 | 2019-06-28 | 60.00 | 1780.00 | USD | Trip to Thailand Po... | A |
| 100 | 00000002 | 070005 | 000005 | 2019-06-13 | 2019-07-16 | 55.00 | 1150.00 | USD | Trip to TechED in Ba... | A |
| 100 | 00000003 | 070010 | 000011 | 2019-06-10 | 2019-07-14 | 61.00 | 1800.00 | USD | Trip to Sapphire in ... | X |
| 100 | 00000004 | 070010 | 000011 | 2019-06-10 | 2019-07-14 | 120.00 | 2800.00 | USD | Trip to DSAG Berlin | X |
| 100 | 00000005 | 070010 | 000011 | 2019-06-10 | 2019-07-14 | 155.00 | 3500.00 | USD | Trip to ASUG Orlando | A |

Congratulations, you have inserted the Data. Now let’s proceed with the creation of CDS in the next exercise.