# Documentation

## Created functions:

GetCheckSumLV(personCode IN VARCHAR2) - function which gets checksum based on PK for LV

GetCheckSumLT(personCode IN VARCHAR2) - function which gets checksum based on PK for LT

PersonCodeValidation( countryCode IN VARCHAR2, personCode IN VARCHAR2) - LV and LT PK validation function which returns TRUE/FALSE

GetGender( countryCode IN VARCHAR2, personCode IN VARCHAR2) - function which returns LT gender from PK and error if it is used for LV

GetLVBirthDate(countryCode IN VARCHAR2, personCode IN VARCHAR2) - function which gets Birth Date based on PK for LV

GetLTBirthDate(countryCode IN VARCHAR2, personCode IN VARCHAR2) - function which gets Birth Date based on PK for LT

GetBirthDate( countryCode IN VARCHAR2, personCode IN VARCHAR2) - function which can get LV or LT birth date based on PK and country code

Mostly all errors process RegEX, last part of errors process GetCheckSum functions

# Testing:

For testing a table was created which stores CountryCode, PersonalCode and is it correct or not PK.

For testing created query:

select pk.\*,

CASE COUNTRY

WHEN 'LV' THEN GetCheckSumLV(pk.personcode)

WHEN 'LT' THEN GetCheckSumLT(pk.personcode)

END AS GetCheckSum,

GetGender(pk.country, pk.personcode),

GetBirthDate(pk.country, pk.personcode),

PersonCodeValidation(pk.country, pk.personcode)

from PersonCode pk;

Test cases:

1. GetGender for LV

2. GetGender for LT

3. GetBirthDate for LV, LT and EE

4. PersonCodeValidation LV and LT:

4.1. Wrong checksum

4.2. Wrong digit count

4.3. Correct PK

## Future development and testing:

* Need to create a table, where to store RegEx and checkSum for LV, LT. It is better. Need to add logging, add errors.
* For errors, you need to know the error format and which errors should be shown to the user.
* Code improvements - fix code for EE and LT not to copy the same code, EE code added last, but not fixed. One of the solutions is to create one function for LV and one for EE and LT, because they are similar, as it is mentioned in sources.

## Used links:

<https://learn.microsoft.com/en-us/microsoft-365/compliance/sit-defn-lithuania-personal-code?view=o365-worldwide>

<https://docs.trellix.com/ru-RU/bundle/data-loss-prevention-11.10.x-classification-definitions-reference-guide/page/GUID-18640812-78BA-42AC-AA66-95F76F433D5A.html>

<https://lt.wikipedia.org/wiki/Asmens_kodas>

<https://codepen.io/serzh/pen/KzdvRy>

<https://learn.microsoft.com/en-us/microsoft-365/compliance/sit-defn-estonia-personal-identification-code?view=o365-worldwide>

<https://fauxid.com/fake-name-generator/latvia?age=18-24&gender=female>

for creation LV pk used this link - <https://codepen.io/serzh/pen/KzdvRy>

for regEx testing was used this link - <https://regex101.com/>