User Guide

Design High level

import urllib.request / import re/ import datetime

function: time

1. now variable to save the current time with a datetime module and n2 split this time in a list
2. in the second variable now = list of 2 str; time_to_check, the program add the 3 hours , (can implement to change the specific time)

function: request_train()

1. while loop to continue the running after the try/ except (possibly to implement the loop and do stronger)
2. response = load the data from the website
3. write response in the file and return to close the loop if done.
4. exception if FileNotFound create the file

function: create_dictionary

1. we use the create_dictionary to make this 3 list in a dictionary { code of the train : [[hh:mm], platform, from]}
2. use zip to combine the 2 first simple list and after we use a for loop to create the general_dictionary

searchinformation()

1. open the file, in this function the program use 3 different regular expression to search the data inside the file.
2. train_time search and return a list,Then I use the content of the list to create an other list with inside little list of 2 elements [code, hours]
3. creation of the train_in_order, because in the html the time was in order and we need in other to print, the program save a list of code train in order like in the html.

4. Create a function to chose what the user will print.

5. in platform regular expression return tuple because the program has to check two different string, in the next we transform in a list and the last check where is from the train

function: check_hour

1. because the html don't return exactly the result for only the next 3 hours we need to check how train arrives in this time check_hour for that we call function time() to have a base for the calculation, we use the variable dictionary to have

2. each time and check it, if the 2 times correspond we add in a new dictionary

function: print_all()

1. In this function we use an other little function lengh() to check if we need 1 or 2 tab for the print

2. we also check the string to print name correctly

function: intput()/ specific_search()

1. ask to an input from the user to know what we have to do, we use a while loop ended only with the insertion of e in the input. specific_search to do the choice more precise.

function: search_train/ search_values()

2 similar function to do a research inside the dictionary and print the result search_train search in the key and the other search inside the values of the dictionary.

function: main()

This function contain the 2 variable with the website address. and create a way to use all the functions.