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Ecole Nationale Supérieure d'Informatique et d'Analyse des Systèmes
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Ecole Nationale Supérieure d'Informatique et d'Analyse des Systèmes

Le traitement des données sur le Web est un aspect important de la construction de modèles d'apprentissage automatique. Comme nous le savons, les données sont en quelque sorte l'opine dorsale de toute série d'apprentissage automatique.Dans ce cet d'utilisation, nous allons discuter des détails d'un site Web Stock Exchange https://www.investing.com/stock-exchange/dubai-india.

Partie 1: scraping

Importation des librarie

```
# Time to are importing all the requests libraries which will help us in scraping the data.
import requests
from bs4 import BeautifulSoup
import pandas as pd
from lxml.html.soupparser import fromstring
import lxml.html
from urllib import request, parser\r\n\r\n
import time
import sys
import pandas
import numpy as np
import matplotlib.pyplot
from statsmodels.sandbox.rpy.rpy3 import rpy3\r\n\r\n
# Time estimate which can slower the scraping process.\r\n\r\n
from statsmodels import stats\r\n\r\n
import time
```

Appel initial au site Web

```
# We know that we do the initial call to the website. Using Beautifulsoup library helps us to parse the
HTML Website and use it further.

url = 'https://www.investing.com/equities/emirates-telecom\r\n\r\n
# We define a variable which stores the URL from which we are going to scrape the data.\r\n\r\n
headers = {'User-Agent': 'Mozilla/5.0'}\r\n\r\n
response = requests.get(url, headers=headers);\r\n\r\n
print('Status code:', response.status_code)
```

1. Scrape the Trending stocks:

Nous allons maintenant scraper les données de la page et il y a 5 deux différents qui montrent quelles actions de la société sont en vogue actuellement. Après avoir obtenu les résultats du site ci-dessus, nous analysons le texte du site web HTML, que ce qui existe aux détails que différent, nous obtenons les détails. Nous pouvons trouver les détails de la classe pour accéder à l'élément dans le fichier html ouvert.

```
# Using the Beautiful Soup library to parse the data.
soup = BeautifulSoup(response.text, 'lxml')
print(soup.prettify())\r\n\r\n
# Using the .find_all() function to find all the tags and its attributes.
table = soup.find('table', {'id': 'cross_rate_1'})\r\n\r\n
# Using the .find() function to find the table with the id.
table_tr = table.find_all('tr')\r\n\r\n
# Using the .find_all() function to find all the tr tags.
print("Number of tr tags: ", len(table_tr))\r\n\r\n
# Printing the length of the tr tags.
for tr in table_tr:\r\n
    td = tr.find_all('td')\r\n
    row = [tt.text.strip() for tt in td]\r\n
    print(row)\r\n\r\n
# Using the for loop to find the td tags and its attributes.
```

```
DATA_TO_WRITE=STRING(TRIM(J7&"|"&K7&"|"&L7&"|"&M7&"|"&N7&"|"&O7&"|"&P7&"|"&Q7&"|"&R7&"|"&S7&"|"&T7&"|"&U7&"|"&V7&"|"&W7&"|"&X7&"|"&Y7&"|"&Z7&"|"&AA7&"|"&AB7&"|"&AC7&"|"&AD7&"|"&AE7&"|"&AF7&"|"&AG7&"|"&AH7&"|"&AI7&"|"&AJ7&"|"&AK7&"|"&AL7&"|"&AM7&"|"&AN7&"|"&AO7&"|"&AP7&"|"&AQ7&"|"&AR7&"|"&AS7&"|"&AT7&"|"&AU7&"|"&AV7&"|"&AW7&"|"&AX7&"|"&AY7&"|"&AZ7&"|"&BA7&"|"&BB7&"|"&BC7&"|"&BD7&"|"&BE7&"|"&BF7&"|"&BG7&"|"&BH7&"|"&BI7&"|"&BJ7&"|"&BK7&"|"&BL7&"|"&BM7&"|"&BN7&"|"&BO7&"|"&BP7&"|"&BQ7&"|"&BR7&"|"&BS7&"|"&BT7&"|"&BU7&"|"&BV7&"|"&BW7&"|"&BX7&"|"&BY7&"|"&BZ7&"|"&CA7&"|"&CB7&"|"&CC7&"|"&CD7&"|"&CE7&"|"&CF7&"|"&CG7&"|"&CH7&"|"&CI7&"|"&CJ7&"|"&CK7&"|"&CL7&"|"&CM7&"|"&CN7&"|"&CO7&"|"&CP7&"|"&CQ7&"|"&CR7&"|"&CS7&"|"&CT7&"|"&CU7&"|"&CV7&"|"&CW7&"|"&CX7&"|"&CY7&"|"&CZ7&"|"&DA7&"|"&DB7&"|"&DC7&"|"&DD7&"|"&DE7&"|"&DF7&"|"&DG7&"|"&DH7&"|"&DI7&"|"&DJ7&"|"&DK7&"|"&DL7&"|"&DM7&"|"&DN7&"|"&DO7&"|"&DP7&"|"&DQ7&"|"&DR7&"|"&DS7&"|"&DT7&"|"&DU7&"|"&DV7&"|"&DW7&"|"&DX7&"|"&DY7&"|"&DZ7&"|"&EA7&"|"&EB7&"|"&EC7&"|"&ED7&"|"&EE7&"|"&EF7&"|"&EG7&"|"&EH7&"|"&EI7&"|"&EJ7&"|"&EK7&"|"&EL7&"|"&EM7&"|"&EN7&"|"&EO7&"|"&EP7&"|"&EQ7&"|"&ER7&"|"&ES7&"|"&ET7&"|"&EU7&"|"&EV7&"|"&EW7&"|"&EX7&"|"&EY7&"|"&EZ7&"|"&FA7&"|"&FB7&"|"&FC7&"|"&FD7&"|"&FE7&"|"&FF7&"|"&FG7&"|"&FH7&"|"&FI7&"|"&FJ7&"|"&FK7&"|"&FL7&"|"&FM7&"|"&FN7&"|"&FO7&"|"&FP7&"|"&FQ7&"|"&FR7&"|"&FS7&"|"&FT7&"|"&FU7&"|"&FV7&"|"&FW7&"|"&FX7&"|"&FY7&"|"&FZ7&"|"&GA7&"|"&GB7&"|"&GC7&"|"&GD7&"|"&GE7&"|"&GF7&"|"&GG7&"|"&GH7&"|"&GI7&"|"&GJ7&"|"&GK7&"|"&GL7&"|"&GM7&"|"&GN7&"|"&GO7&"|"&GP7&"|"&GQ7&"|"&GR7&"|"&GS7&"|"&GT7&"|"&GU7&"|"&GV7&"|"&GW7&"|"&GX7&"|"&GY7&"|"&GZ7&"|"&HA7&"|"&HB7&"|"&HC7&"|"&HD7&"|"&HE7&"|"&HF7&"|"&HG7&"|"&HH7&"|"&HI7&"|"&HJ7&"|"&HK7&"|"&HL7&"|"&HM7&"|"&HN7&"|"&HO7&"|"&HP7&"|"&HQ7&"|"&HR7&"|"&HS7&"|"&HT7&"|"&HU7&"|"&HV7&"|"&HW7&"|"&HX7&"|"&HY7&"|"&HZ7&"|"&IA7&"|"&IB7&"|"&IC7&"|"&ID7&"|"&IE7&"|"&IF7&"|"&IG7&"|"&IH7&"|"&II7&"|"&IJ7&"|"&IK7&"|"&IL7&"|"&IM7&"|"&IN7&"|"&IO7&"|"&IP7&"|"&IQ7&"|"&IR7&"|"&IS7&"|"&IT7&"|"&IU7&"|"&IV7&"|"&IW7&"|"&IX7&"|"&IY7&"|"&IZ7&"|"&JA7&"|"&JB7&"|"&JC7&"|"&JD7&"|"&JE7&"|"&JF7&"|"&JG7&"|"&JH7&"|"&JI7&"|"&JJ7&"|"&JK7&"|"&JL7&"|"&JM7&"|"&JN7&"|"&JO7&"|"&JP7&"|"&JQ7&"|"&JR7&"|"&JS7&"|"&JT7&"|"&JU7&"|"&JV7&"|"&JW7&"|"&JX7&"|"&JY7&"|"&JZ7&"|"&KA7&"|"&KB7&"|"&KC7&"|"&KD7&"|"&KE7&"|"&KF7&"|"&KG7&"|"&KH7&"|"&KI7&"|"&KJ7&"|"&KK7&"|"&KL7&"|"&KM7&"|"&KN7&"|"&KO7&"|"&KP7&"|"&KQ7&"|"&KR7&"|"&KS7&"|"&KT7&"|"&KU7&"|"&KV7&"|"&KW7&"|"&KX7&"|"&KY7&"|"&KZ7&"|"&LA7&"|"&LB7&"|"&LC7&"|"&LD7&"|"&LE7&"|"&LF7&"|"&LG7&"|"&LH7&"|"&LI7&"|"&LJ7&"|"&LK7&"|"&LL7&"|"&LM7&"|"&LN7&"|"&LO7&"|"&LP7&"|"&LQ7&"|"&LR7&"|"&LS7&"|"&LT7&"|"&LU7&"|"&LV7&"|"&LW7&"|"&LX7&"|"&LY7&"|"&LZ7&"|"&MA7&"|"&MB7&"|"&MC7&"|"&MD7&"|"&ME7&"|"&MF7&"|"&MG7&"|"&MH7&"|"&MI7&"|"&MJ7&"|"&MK7&"|"&ML7&"|"&MM7&"|"&MN7&"|"&MO7&"|"&MP7&"|"&MQ7&"|"&MR7&"|"&MS7&"|"&MT7&"|"&MU7&"|"&MV7&"|"&MW7&"|"&MX7&"|"&MY7&"|"&MZ7&"|"&NA7&"|"&NB7&"|"&NC7&"|"&ND7&"|"&NE7&"|"&NF7&"|"&NG7&"|"&NH7&"|"&NI7&"|"&NJ7&"|"&NK7&"|"&NL7&"|"&NM7&"|"&NN7&"|"&NO7&"|"&NP7&"|"&NQ7&"|"&NR7&"|"&NS7&"|"&NT7&"|"&NU7&"|"&NV7&"|"&NW7&"|"&NX7&"|"&NY7&"|"&NZ7&"|"&OA7&"|"&OB7&"|"&OC7&"|"&OD7&"|"&OE7&"|"&OF7&"|"&OG7&"|"&OH7&"|"&OI7&"|"&OJ7&"|"&OK7&"|"&OL7&"|"&OM7&"|"&ON7&"|"&OO7&"|"&OP7&"|"&OQ7&"|"&OR7&"|"&OS7&"|"&OT7&"|"&OU7&"|"&OV7&"|"&OW7&"|"&OX7&"|"&OY7&"|"&OZ7&"|"&PA7&"|"&PB7&"|"&PC7&"|"&PD7&"|"&PE7&"|"&PF7&"|"&PG7&"|"&PH7&"|"&PI7&"|"&PJ7&"|"&PK7&"|"&PL7&"|"&PM7&"|"&PN7&"|"&PO7&"|"&PP7&"|"&PQ7&"|"&PR7&"|"&PS7&"|"&PT7&"|"&PU7&"|"&PV7&"|"&PW7&"|"&PX7&"|"&PY7&"|"&PZ7&"|"&QA7&"|"&QB7&"|"&QC7&"|"&QD7&"|"&QE7&"|"&QF7&"|"&QG7&"|"&QH7&"|"&QI7&"|"&QJ7&"|"&QK7&"|"&QL7&"|"&QM7&"|"&QN7&"|"&QO7&"|"&QP7&"|"&QQ7&"|"&QR7&"|"&QS7&"|"&QT7&"|"&QU7&"|"&QV7&"|"&QW7&"|"&QX7&"|"&QY7&"|"&QZ7&"|"&RA7&"|"&RB7&"|"&RC7&"|"&RD7&"|"&RE7&"|"&RF7&"|"&RG7&"|"&RH7&"|"&RI7&"|"&RJ7&"|"&RK7&"|"&RL7&"|"&RM7&"|"&RN7&"|"&RO7&"|"&RP7&"|"&RQ7&"|"&RR7&"|"&RS7&"|"&RT7&"|"&RU7&"|"&RV7&"|"&RW7&"|"&RX7&"|"&RY7&"|"&RZ7&"|"&SA7&"|"&SB7&"|"&SC7&"|"&SD7&"|"&SE7&"|"&SF7&"|"&SG7&"|"&SH7&"|"&SI7&"|"&SJ7&"|"&SK7&"|"&SL7&"|"&SM7&"|"&SN7&"|"&SO7&"|"&SP7&"|"&SQ7&"|"&SR7&"|"&SS7&"|"&ST7&"|"&SU7&"|"&SV7&"|"&SW7&"|"&SX7&"|"&SY7&"|"&SZ7&"|"&TA7&"|"&TB7&"|"&TC7&"|"&TD7&"|"&TE7&"|"&TF7&"|"&TG7&"|"&TH7&"|"&TI7&"|"&TJ7&"|"&TK7&"|"&TL7&"|"&TM7&"|"&TN7&"|"&TO7&"|"&TP7&"|"&TQ7&"|"&TR7&"|"&TS7&"|"&TT7&"|"&TU7&"|"&TV7&"|"&TW7&"|"&TX7&"|"&TY7&"|"&TZ7&"|"&UA7&"|"&UB7&"|"&UC7&"|"&UD7&"|"&UE7&"|"&UF7&"|"&UG7&"|"&UH7&"|"&UI7&"|"&UJ7&"|"&UK7&"|"&UL7&"|"&UM7&"|"&UN7&"|"&UO7&"|"&UP7&"|"&UQ7&"|"&UR7&"|"&US7&"|"&UT7&"|"&UU7&"|"&UV7&"|"&UW7&"|"&UX7&"|"&UY7&"|"&UZ7&"|"&VA7&"|"&VB7&"|"&VC7&"|"&VD7&"|"&VE7&"|"&VF7&"|"&VG7&"|"&VH7&"|"&VI7&"|"&VJ7&"|"&VK7&"|"&VL7&"|"&VM7&"|"&VN7&"|"&VO7&"|"&VP7&"|"&VQ7&"|"&VR7&"|"&VS7&"|"&VT7&"|"&VU7&"|"&VV7&"|"&VW7&"|"&VX7&"|"&VY7&"|"&VZ7&"|"&WA7&"|"&WB7&"|"&WC7&"|"&WD7&"|"&WE7&"|"&WF7&"|"&WG7&"|"&WH7&"|"&WI7&"|"&WJ7&"|"&WK7&"|"&WL7&"|"&WM7&"|"&WN7&"|"&WO7&"|"&WP7&"|"&WQ7&"|"&WR7&"|"&WS7&"|"&WT7&"|"&WU7&"|"&WV7&"|"&WW7&"|"&WX7&"|"&WY7&"|"&WZ7&"|"&XA7&"|"&XB7&"|"&XC7&"|"&XD7&"|"&XE7&"|"&XF7&"|"&XG7&"|"&XH7&"|"&XI7&"|"&XJ7&"|"&XK7&"|"&XL7&"|"&XM7&"|"&XN7&"|"&XO7&"|"&XP7&"|"&XQ7&"|"&XR7&"|"&XS7&"|"&XT7&"|"&XU7&"|"&XV7&"|"&XW7&"|"&XX7&"|"&XY7&"|"&XZ7&"|"&YA7&"|"&YB7&"|"&YC7&"|"&YD7&"|"&YE7&"|"&YF7&"|"&YG7&"|"&YH7&"|"&YI7&"|"&YJ7&"|"&YK7&"|"&YL7&"|"&YM7&"|"&YN7&"|"&YO7&"|"&YP7&"|"&YQ7&"|"&YR7&"|"&YS7&"|"&YT7&"|"&YU7&"|"&YV7&"|"&YW7&"|"&YX7&"|"&YY7&"|"&YZ7&"|"&ZA7&"|"&ZB7&"|"&ZC7&"|"&ZD7&"|"&ZE7&"|"&ZF7&"|"&ZG7&"|"&ZH7&"|"&ZI7&"|"&ZJ7&"|"&ZK7&"|"&ZL7&"|"&ZM7&"|"&ZN7&"|"&ZO7&"|"&ZP7&"|"&ZQ7&"|"&ZR7&"|"&ZS7&"|"&ZT7&"|"&ZU7&"|"&ZV7&"|"&ZW7&"|"&ZX7&"|"&ZY7&"|"&ZZ7&"|"&AA8&"|"&AB8&"|"&AC8&"|"&AD8&"|"&AE8&"|"&AF8&"|"&AG8&"|"&AH8&"|"&AI8&"|"&AJ8&"|"&AK8&"|"&AL8&"|"&AM8&"|"&AN8&"|"&AO8&"|"&AP8&"|"&AQ8&"|"&AR8&"|"&AS8&"|"&AT8&"|"&AU8&"|"&AV8&"|"&AW8&"|"&AX8&"|"&AY8&"|"&AZ8&"|"&BA8&"|"&BB8&"|"&BC8&"|"&BD8&"|"&BE8&"|"&BF8&"|"&BG8&"|"&BH8&"|"&BI8&"|"&BJ8&"|"&BK8&"|"&BL8&"|"&BM8&"|"&BN8&"|"&BO8&"|"&BP8&"|"&BQ8&"|"&BR8&"|"&BS8&"|"&BT8&"|"&BU8&"|"&BV8&"|"&BW8&"|"&BX8&"|"&BY8&"|"&BZ8&"|"&CA8&"|"&CB8&"|"&CC8&"|"&CD8&"|"&CE8&"|"&CF8&"|"&CG8&"|"&CH8&"|"&CI8&"|"&CJ8&"|"&CK8&"|"&CL8&"|"&CM8&"|"&CN8&"|"&CO8&"|"&CP8&"|"&CQ8&"|"&CR8&"|"&CS8&"|"&CT8&"|"&CU8&"|"&CV8&"|"&CW8&"|"&CX8&"|"&CY8&"|"&CZ8&"|"&DA8&"|"&DB8&"|"&DC8&"|"&DD8&"|"&DE8&"|"&DF8&"|"&DG8&"|"&DH8&"|"&DI8&"|"&DJ8&"|"&DK8&"|"&DL8&"|"&DM8&"|"&DN8&"|"&DO8&"|"&DP8&"|"&DQ8&"|"&DR8&"|"&DS8&"|"&DT8&"|"&DU8&"|"&DV8&"|"&DW8&"|"&DX8&"|"&DY8&"|"&DZ8&"|"&EA8&"|"&EB8&"|"&EC8&"|"&ED8&"|"&EE8&"|"&EF8&"|"&EG8&"|"&EH8&"|"&EI8&"|"&EJ8&"|"&EK8&"|"&EL8&"|"&EM8&"|"&EN8&"|"&EO8&"|"&EP8&"|"&EQ8&"|"&ER8&"|"&ES8&"|"&ET8&"|"&EU8&"|"&EV8&"|"&EW8&"|"&EX8&"|"&EY8&"|"&EZ8&"|"&FA8&"|"&FB8&"|"&FC8&"|"&FD8&"|"&FE8&"|"&FF8&"|"&FG8&"|"&FH8&"|"&FI8&"|"&FJ8&"|"&FK8&"|"&FL8&"|"&FM8&"|"&FN8&"|"&FO8&"|"&FP8&"|"&FQ8&"|"&FR8&"|"&FS8&"|"&FT8&"|"&FU8&"|"&FV8&"|"&FW8&"|"&FX8&"|"&FY8&"|"&FZ8&"|"&GA8&"|"&GB8&"|"&GC8&"|"&GD8&"|"&GE8&"|"&GF8&"|"&GG8&"|"&GH8&"|"&GI8&"|"&GJ8&"|"&GK8&"|"&GL8&"|"&GM8&"|"&GN8&"|"&GO8&"|"&GP8&"|"&GQ8&"|"&GR8&"|"&GS8&"|"&GT8&"|"&GU8&"|"&GV8&"|"&GW8&"|"&GX8&"|"&GY8&"|"&GZ8&"|"&HA8&"|"&HB8&"|"&HC8&"|"&HD8&"|"&HE8&"|"&HF8&"|"&HG8&"|"&HH8&"|"&HI8&"|"&HJ8&"|"&HK8&"|"&HL8&"|"&HM8&"|"&HN8&"|"&HO8&"|"&HP8&"|"&HQ8&"|"&HR8&"|"&HS8&"|"&HT8&"|"&HU8&"|"&HV8&"|"&HW8&"|"&HX8&"|"&HY8&"|"&HZ8&"|"&IA8&"|"&IB8&"|"&IC8&"|"&ID8&"|"&IE8&"|"&IF8&"|"&IG8&"|"&IH8&"|"&II8&"|"&IJ8&"|"&IK8&"|"&IL8&"|"&IM8&"|"&IN8&"|"&IO8&"|"&IP8&"|"&IQ8&"|"&IR8&"|"&IS8&"|"&IT8&"|"&IU8&"|"&IV8&"|"&IW8&"|"&IX8&"|"&IY8&"|"&IZ8&"|"&JA8&"|"&JB8&"|"&JC8&"|"&JD8&"|"&JE8&"|"&JF8&"|"&JG8&"|"&JH8&"|"&JI8&"|"&JJ8&"|"&JK8&"|"&JL8&"|"&JM8&"|"&JN8&"|"&JO8&"|"&JP8&"|"&JQ8&"|"&JR8&"|"&JS8&"|"&JT8&"|"&JU8&"|"&JV8&"|"&JW8&"|"&JX8&"|"&JY8&"|"&JZ8&"|"&KA8&"|"&KB8&"|"&KC8&"|"&KD8&"|"&KE8&"|"&KF8&"|"&KG8&"|"&KH8&"|"&KI8&"|"&KJ8&"|"&KK8&"|"&KL8&"|"&KM8&"|"&KN8&"|"&KO8&"|"&KP8&"|"&KQ8&"|"&KR8&"|"&KS8&"|"&KT8&"|"&KU8&"|"&KV8&"|"&KW8&"|"&KX8&"|"&KY8&"|"&KZ8&"|"&LA8&"|"&LB8&"|"&LC8&"|"&LD8&"|"&LE8&"|"&LF8&"|"&LG8&"|"&LH8&"|"&LI8&"|"&LJ8&"|"&LK8&"|"&LL8&"|"&LM8&"|"&LN8&"|"&LO8&"|"&LP8&"|"&LQ8&"|"&LR8&"|"&LS8&"|"&LT8&"|"&LU8&"|"&LV8&"|"&LW8&"|"&LX8&"|"&LY8&"|"&LZ8&"|"&MA8&"|"&MB8&"|"&MC8&"|"&MD8&"|"&ME8&"|"&MF8&"|"&MG8&"|"&MH8&"|"&MI8&"|"&MJ8&"|"&MK8&"|"&ML8&"|"&MM8&"|"&MN8&"|"&MO8&"|"&MP8&"|"&MQ8&"|"&MR8&"|"&MS8&"|"&MT8&"|"&MU8&"|"&MV8&"|"&MW8&"|"&MX8&"|"&MY8&"|"&MZ8&"|"&NA8&"|"&NB8&"|"&NC8&"|"&ND8&"|"&NE8&"|"&NF8&"|"&NG8&"|"&NH8&"|"&NI8&"|"&NJ8&"|"&NK8&"|"&NL8&"|"&NM8&"|"&NN8&"|"&NO8&"|"&NP8&"|"&NQ8&"|"&NR8&"|"&NS8&"|"&NT8&"|"&NU8&"|"&NV8&"|"&NW8&"|"&NX8&"|"&NY8&"|"&NZ8&"|"&OA8&"|"&OB8&"|"&OC8&"|"&OD8&"|"&OE8&"|"&OF8&"|"&OG8&"|"&OH8&"|"&OI8&"|"&OJ8&"|"&OK8&"|"&OL8&"|"&OM8&"|"&ON8&"|"&OO8&"|"&OP8&"|"&OQ8&"|"&OR8&"|"&OS8&"|"&OT8&"|"&OU8&"|"&OV8&"|"&OW8&"|"&OX8&"|"&OY8&"|"&OZ8&"|"&PA8&"|"&PB8&"|"&PC8&"|"&PD8&"|"&PE8&"|"&PF8&"|"&PG8&"|"&PH8&"|"&PI8&"|"&PJ8&"|"&PK8&"|"&PL8&"|"&PM8&"|"&PN8&"|"&PO8&"|"&PP8&"|"&PQ8&"|"&PR8&"|"&PS8&"|"&PT8&"|"&PU8&"|"&PV8&"|"&PW8&"|"&PX8&"|"&PY8&"|"&PZ8&"|"&QA8&"|"&QB8&"|"&QC8&"|"&QD8&"|"&QE8&"|"&QF8&"|"&QG8&"|"&QH8&"|"&QI8&"|"&QJ8&"|"&QK8&"|"&QL8&"|"&QM8&"|"&QN8&"|"&QO8&"|"&QP8&"|"&QQ8&"|"&QR8&"|"&QS8&"|"&QT8&"|"&QU8&"|"&QV8&"|"&QW8&"|"&QX8&"|"&QY8&"|"&QZ8&"|"&RA8&"|"&RB8&"|"&RC8&"|"&RD8&"|"&RE8&"|"&RF8&"|"&RG8&"|"&RH8&"|"&RI8&"|"&RJ8&"|"&RK8&"|"&RL8&"|"&RM8&"|"&RN8&"|"&RO8&"|"&RP8&"|"&RQ8&"|"&RR8&"|"&RS8&"|"&RT8&"|"&RU8&"|"&RV8&"|"&RW8&"|"&RX8&"|"&RY8&"|"&RZ8&"|"&SA8&"|"&SB8&"|"&SC8&"|"&SD8&"|"&SE8&"|"&SF8&"|"&SG8&"|"&SH8&"|"&SI8&"|"&SJ8&"|"&SK8&"|"&SL8&"|"&SM8&"|"&SN8&"|"&SO8&"|"&SP8&"|"&SQ8&"|"&SR8&"|"&SS8&"|"&ST8&"|"&SU8&"|"&SV8&"|"&SW8&"|"&SX8&"|"&SY8&"|"&SZ8&"|"&TA8&"|"&TB8&"|"&TC8&"|"&TD8&"|"&TE8&"|"&TF8&"|"&TG8&"|"&TH8&"|"&TI8&"|"&TJ8&"|"&TK8&"|"&TL8&"|"&TM8&"|"&TN8&"|"&TO8&"|"&TP8&"|"&TQ8&"|"&TR8&"|"&TS8&"|"&TT8&"|"&TU8&"|"&TV8&"|"&TW8&"|"&TX8&"|"&TY8&"|"&TZ8&"|"&UA8&"|"&UB8&"|"&UC8&"|"&UD8&"|"&UE8&"|"&UF8&"|"&UG8&"|"&UH8&"|"&UI8&"|"&UJ8&"|"&UK8&"|"&UL8&"|"&UM8&"|"&UN8&"|"&UO8&"|"&UP8&"|"&UQ8&"|"&UR8&"|"&US8&"|"&UT8&"|"&UU8&"|"&UV8&"|"&UW8&"|"&UX8&"|"&UY8&"|"&UZ8&"|"&VA8&"|"&VB8&"|"&VC8&"|"&VD8&"|"&VE8&"|"&VF8&"|"&VG8&"|"&VH8&"|"&VI8&"|"&VJ8&"|"&VK8&"|"&VL8&"|"&VM8&"|"&VN8&"|"&VO8&"|"&VP8&"|"&VQ8&"|"&VR8&"|"&VS8&"|"&VT8&"|"&VU8&"|"&VV8&"|"&VW8&"|"&VX8&"|"&VY8&"|"&VZ8&"|"&WA8&"|"&WB8&"|"&WC8&"|"&WD8&"|"&WE8&"|"&WF8&"|"&WG8&"|"&WH8&"|"&WI8&"|"&WJ8&"|"&WK8&"|"&WL8&"|"&WM8&"|"&WN8&"|"&WO8&"|"&WP8&"|"&WQ8&"|"&WR8&"|"&WS8&"|"&WT8&"|"&WU8&"|"&WV8&"|"&WW8&"|"&WX8&"|"&WY8&"|"&WZ8&"|"&XA8&"|"&XB8&"|"&XC8&"|"&XD8&"|"&XE8&"|"&XF8&"|"&XG8&"|"&XH8&"|"&XI8&"|"&XJ8&"|"&XK8&"|"&XL8&"|"&XM8&"|"&XN8&"|"&XO8&"|"&XP8&"|"&XQ8&"|"&XR8&"|"&XS8&"|"&XT8&"|"&XU8&"|"&XV8&"|"&XW8&"|"&XX8&"|"&XY8&"|"&XZ8&"|"&YA8&"|"&YB8&"|"&YC8&"|"&YD8&"|"&YE8&"|"&YF8&"|"&YG8&"|"&YH8&"|"&YI8&"|"&YJ8&"|"&YK8&"|"&YL8&"|"&YM8&"|"&YN8&"|"&YO8&"|"&YP8&"|"&YQ8&"|"&YR8&"|"&YS8&"|"&YT8&"|"&YU8&"|"&YV8&"|"&YW8&"|"&YX8&"|"&YY8&"|"&YZ8&"|"&ZA8&"|"&ZB8&"|"&ZC8&"|"&ZD8&"|"&ZE8&"|"&ZF8&"|"&ZG8&"|"&ZH8&"|"&ZI8&"|"&ZJ8&"|"&ZK8&"|"&ZL8&"|"&ZM8&"|"&ZN8&"|"&ZO8&"|"&ZP8&"|"&ZQ8&"|"&ZR8&"|"&ZS8&"|"&ZT8&"|"&ZU8&"|"&ZV8&"|"&ZW8&"|"&ZX8&"|"&ZY8&"|"&ZZ8&"|"&AA9&"|"&AB9&"|"&AC9&"|"&AD9&"|"&AE9&"|"&AF9&"|"&AG9&"|"&AH9&"|"&AI9&"|"&AJ9&"|"&AK9&"|"&AL9&"|"&AM9&"|"&AN9&"|"&AO9&"|"&AP9&"|"&AQ9&"|"&AR9&"|"&AS9&"|"&AT9&"|"&AU9&"|"&AV9&"|"&AW9&"|"&AX9&"|"&AY9&"|"&AZ9&"|"&BA9&"|"&BB9&"|"&BC9&"|"&BD9&"|"&BE9&"|"&BF9&"|"&BG9&"|"&BH9&"|"&BI9&"|"&BJ9&"|"&BK9&"|"&BL9&"|"&BM9&"|"&BN9&"|"&BO9&"|"&BP9&"|"&BQ9&"|"&BR9&"|"&BS9&"|"&BT9&"|"&BU9&"|"&BV9&"|"&BW9&"|"&BX9&"|"&BY9&"|"&BZ9&"|"&CA9&"|"&CB9&"|"&CC9&"|"&CD9&"|"&CE9&"|"&CF9&"|"&CG9&"|"&CH9&"|"&CI9&"|"&CJ9&"|"&CK9&"|"&CL9&"|"&CM9&"|"&CN9&"|"&CO9&"|"&CP9&"|"&CQ9&"|"&CR9&"|"&CS9&"|"&CT9&"|"&CU9&"|"&CV9&"|"&CW9&"|"&CX9&"|"&CY9&"|"&CZ9&"|"&DA9&"|"&DB9&"|"&DC9&"|"&DD9&"|"&DE9&"|"&DF9&"|"&DG9&"|"&DH9&"|"&DI9&"|"&DJ9&"|"&DK9&"|"&DL9&"|"&DM9&"|"&DN9&"|"&DO9&"|"&DP9&"|"&DQ9&"|"&DR9&"|"&DS9&"|"&DT9&"|"&DU9&"|"&DV9&"|"&DW9&"|"&DX9&"|"&DY9&"|"&DZ9&"|"&EA9&"|"&EB9&"|"&EC9&"|"&ED9&"|"&EE9&"|"&EF9&"|"&EG9&"|"&EH9&"|"&EI9&"|"&EJ9&"|"&EK9&"|"&EL9&"|"&EM9&"|"&EN9&"|"&EO9&"|"&EP9&"|"&EQ9&"|"&ER9&"|"&ES9&"|"&ET9&"|"&EU9&"|"&EV9&"|"&EW9&"|"&EX9&"|"&EY9&"|"&EZ9&"|"&FA9&"|"&FB9&"|"&FC9&"|"&FD9&"|"&FE9&"|"&FF9&"|"&FG9&"|"&FH9&"|"&FI9&"|"&FJ9&"|"&FK9&"|"&FL9&"|"&FM9&"|"&FN9&"|"&FO9&"|"&FP9&"|"&FQ9&"|"&FR9&"|"&FS9&"|"&FT9&"|"&FU9&"|"&FV9&"|"&FW9&"|"&FX9&"|"&FY9&"|"&FZ9&"|"&GA9&"|"&GB9&"|"&GC9&"|"&GD9&"|"&GE9&"|"&GF9&"|"&GG9&"|"&GH9&"|"&GI9&"|"&GJ9&"|"&GK9&"|"&GL9&"|"&GM9&"|"&GN9&"|"&GO9&"|"&GP9&"|"&GQ9&"|"&GR9&"|"&GS9&"|"&GT9&"|"&GU9&"|"&GV9&"|"&GW9&"|"&GX9&"|"&GY9&"|"&GZ9&"|"&HA9&"|"&HB9&"|"&HC9&"|"&HD9&"|"&HE9&"|"&HF9&"|"&HG9&"|"&HH9&"|"&HI9&"|"&HJ9&"|"&HK9&"|"&HL9&"|"&HM9&"|"&HN9&"|"&HO9&"|"&HP9&"|"&HQ9&"|"&HR9&"|"&HS9&"|"&HT9&"|"&HU9&"|"&HV9&"|"&HW9&"|"&HX9&"|"&HY9&"|"&HZ9&"|"&IA9&"|"&IB9&"|"&IC9&"|"&ID9&"|"&IE9&"|"&IF9&"|"&IG9&"|"&IH9&"|"&II9&"|"&IJ9&"|"&IK9&"|"&IL9&"|"&IM9&"|"&IN9&"|"&IO9&"|"&IP9&"|"&IQ9&"|"&IR9&"|"&IS9&"|"&IT9&"|"&IU9&"|"&IV9&"|"&IW9&"|"&IX9&"|"&IY9&"|"&IZ9&"|"&JA9&"|"&JB9&"|"&JC9&"|"&JD9&"|"&JE9&"|"&JF9&"|"&JG9&"|"&JH9&"|"&JI9&"|"&JJ9&"|"&JK9&"|"&JL9&"|"&JM9&"|"&JN9&"|"&JO9&"|"&JP9&"|"&JQ9&"|"&JR9&"|"&JS9&"|"&JT9&"|"&JU9&"|"&JV9&"|"&JW9&"|"&JX9&"|"&JY9&"|"&JZ9&"|"&KA9&"|"&KB9&"|"&KC9&"|"&KD9&"|"&KE9&"|"&KF9&"|"&KG9&"|"&KH9&"|"&KI9&"|"&KJ9&"|"&KK9&"|"&KL9&"|"&KM9&"|"&KN9&"|"&KO9&"|"&KP9&"|"&KQ9&"|"&KR9&"|"&KS9&"|"&KT9&"|"&KU9&"|"&KV9&"|"&KW9&"|"&KX9&"|"&KY9&"|"&KZ9&"|"&LA9&"|"&LB9&"|"&LC9&"|"&LD9&"|"&LE9&"|"&LF9&"|"&LG9&"|"&LH9&"|"&LI9&"|"&LJ9&"|"&LK9&"|"&LL9&"|"&LM9&"|"&LN9&"|"&LO9&"|"&LP9&"|"&LQ9&"|"&LR9&"|"&LS9&"|"&LT9&"|"&LU9&"|"&LV9&"|"&LW9&"|"&LX9&"|"&LY9&"|"&LZ9&"|"&MA9&"|"&MB9&"|"&MC9&"|"&MD9&"|"&ME9&"|"&MF9&"|"&MG9&"|"&MH9&"|"&MI9&"|"&MJ9&"|"&MK9&"|"&ML9&"|"&MM9&"|"&MN9&"|"&MO9&"|"&MP9&"|"&MQ9&"|"&MR9&"|"&MS9&"|"&MT9&"|"&MU9&"|"&MV9&"|"&MW9&"|"&MX9&"|"&MY9&"|"&MZ9&"|"&NA9&"|"&NB9&"|"&NC9&"|"&ND9&"|"&NE9&"|"&NF9&"|"&NG9&"|"&NH9&"|"&NI9&"|"&NJ9&"|"&NK9&"|"&NL9&"|"&NM9&"|"&NN9&"|"&NO9&"|"&NP9&"|"&NQ9&"|"&NR9&"|"&NS9&"|"&NT9&"|"&NU9&"|"&NV9&"|"&NW9&"|"&NX9&"|"&NY9&"|"&NZ9&"|"&OA9&"|"&OB9&"|"&OC9&"|"&OD9&"|"&OE9&"|"&OF9&"|"&OG9&"|"&OH9&"|"&OI9&"|"&OJ9&"|"&OK9&"|"&OL9&"|"&OM9&"|"&ON9&"|"&OO9&"|"&OP9&"|"&OQ9&"|"&OR9&"|"&OS9&"|"&OT9&"|"&OU9&"|"&OV9&"|"&OW9&"|"&OX9&"|"&OY9&"|"&OZ9&"|"&PA9&"|"&PB9&"|"&PC9&"|"&PD9&"|"&PE9&"|"&PF9&"|"&PG9&"|"&PH9&"|"&PI9&"|"&PJ9&"|"&PK9&"|"&PL9&"|"&PM9&"|"&PN9&"|"&PO9&"|"&PP9&"|"&PQ9&"|"&PR9&"|"&PS9&"|"&PT9&"|"&PU9&"|"&PV9&"|"&PW9&"|"&PX9&"|"&PY9&"|"&PZ9&"|"&QA9&"|"&QB9&"|"&QC9&"|"&QD9&"|"&QE9&"|"&QF9&"|"&QG9&"|"&
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