

# 04

December 8, 2020

## 1 Day 4: Passport Processing

Zach Bogart

- <https://adventofcode.com/2020/day/4>

### 1.1 Setup

- had to pull in the data, split it up, and make it into a list of dictionaries

```
[2]: import re
import pandas as pd
pd.set_option("display.max_rows", 250)

from IPython.display import display, Latex
```

#### 1.1.1 Read in File

```
[2]: with open("inputs/04-input.txt", "r") as f:
    raw = f.readlines()
```

```
[3]: # make one big string
one_string = "".join(raw)
```

```
[4]: # split up with different delimiters
one_string = re.sub("\n\n", "---", one_string)
one_string = re.sub("\n$", "", one_string)
one_string = re.sub("\n", ",", one_string)
one_string = re.sub(" ", ",", one_string)
```

```
[92]: one_string[:500]
```

```
[92]: 'byr:1983,iyr:2017,pid:796082981,cid:129,eyr:2030,ecl:oth,hgt:182cm---iyr:2019,c
id:314,eyr:2039,hcl:#cfa07d,hgt:171cm,ecl:#0180ce,byr:2006,pid:8204115568---
byr:1991,eyr:2022,hcl:#341e13,iyr:2016,pid:729933757,hgt:167cm,ecl:gry---
hcl:231d64,cid:124,ecl:gmt,eyr:2039,hgt:189in,pid:#9c3ea1---
ecl:#1f58f9,pid:#758e59,iyr:2022,hcl:z,byr:2016,hgt:68,eyr:1933---
hcl:#ffffffd,ecl:gry,eyr:2022,hgt:172cm,pid:781914826,byr:1930,iyr:2018---
hcl:#08df7e,ecl:grn,byr:1942,eyr:2028,iyr:2011,cid:141,pid:319110455,hgt:'
```

```
[6]: # make list of strings describing each dict
dict_strings = one_string.split("----")
```

```
[7]: # unpack each string into a dict, append
passports = []
for string in dict_strings:
    result = dict((key, val)
                  for key, val in (item.split(':')
                                   for item in string.split(",")))
    passports.append(result)
```

```
[8]: passports[:3]
```

```
[8]: [{ 'byr': '1983',
        'iyr': '2017',
        'pid': '796082981',
        'cid': '129',
        'eyr': '2030',
        'ecl': 'oth',
        'hgt': '182cm'},
      { 'iyr': '2019',
        'cid': '314',
        'eyr': '2039',
        'hcl': '#cfa07d',
        'hgt': '171cm',
        'ecl': '#0180ce',
        'byr': '2006',
        'pid': '8204115568'},
      { 'byr': '1991',
        'eyr': '2022',
        'hcl': '#341e13',
        'iyr': '2016',
        'pid': '729933757',
        'hgt': '167cm',
        'ecl': 'gry'}]
```

```
[3]: display(Latex(r"\newpage"))
```

## 2 Part 1

- check for 8 keys OR 7 keys but missing cid

```
[59]: valid_passports_1 = []  
      for entry in passports:  
          num_fields = len(entry.keys())  
          # print(num_fields)  
          if ((num_fields == 8) or  
              (num_fields == 7 and 'cid' not in entry.keys())):  
              valid_passports_1.append(entry)
```

```
[61]: len(valid_passports_1)
```

```
[61]: 239
```

```
[4]: display(Latex(r"\newpage"))
```

### 3 Part 2

- a lot more to check!
- **got tripped up with regular expressions:** Had one more than correct answer (189). Happened to input 188 to see a new error message, but ended up getting the right answer! Took a while to track down looking at the results as a pandas dataframe. Had to be more explicit with the regex for pid in particular (could have happened for any of them initially). Didn't specify bounds of string with `^$` so had a pid with ten digits that went unnoticed. Dang! Super sneaky bug!
  - Be explicit with regex!

```
[83]: valid_passports_2 = []
for entry in valid_passports_1:
    num_fields = len(entry.keys())
    if ((num_fields == 8) or
        (num_fields == 7 and 'cid' not in entry.keys())):

        # byr (birth year)
        byr = int(entry['byr'])
        if byr < 1920 or byr > 2002:
            continue

        # iyr (issue year)
        iyr = int(entry['iyr'])
        if iyr < 2010 or iyr > 2020:
            continue

        # eyr (expiration year)
        eyr = int(entry['eyr'])
        if eyr < 2020 or eyr > 2030:
            continue

        # hgt (height)
        hgt = entry['hgt']
        if not re.match("^\\d+[a-z]{2}$", hgt):
            continue

        hgt_unit = entry['hgt'][-2:]
        hgt_value = int(entry['hgt'][:-2])

        if hgt_unit not in ['cm', 'in']:
            continue

        if hgt_unit == "cm":
            if hgt_value < 150 or hgt_value > 193:
                continue
        if hgt_unit == "in":
```

```

        if hgt_value < 59 or hgt_value > 76:
            continue

        # hcl (hair color)
        hcl = entry['hcl']
        if not (re.match("^#[0-9a-f]{6}$", hcl)):
            continue

        # ecl (eye color)
        ecl = entry['ecl']
        if ecl not in ['amb', 'blu', 'brn', 'gry', 'grn', 'hzl', 'oth']:
            continue

        # pid (passport id)
        pid = entry['pid']
        if not (re.match("[0-9]{9}$", pid)):
            continue

        # at the end, it is valid
        valid_passports_2.append(entry)

```

```
[85]: len(valid_passports_2)
```

```
[85]: 188
```

```
[5]: display(Latex(r"\newpage"))
```

## 4 Results

### 4.0.1 Part 1

```
[89]: pd.DataFrame(valid_passports_1)
```

```
[89]:
```

	iyр	сid	eyr	hcl	hgt	ec1	byr	pid
0	2019	314	2039	#cfa07d	171cm	#0180ce	2006	8204115568
1	2016	NaN	2022	#341e13	167cm	gry	1991	729933757
2	2022	NaN	1933	z	68	#1f58f9	2016	#758e59
3	2018	NaN	2022	#ffffffd	172cm	gry	1930	781914826
4	2011	141	2028	#08df7e	186cm	grn	1942	319110455
5	2005	163	1994	2964fb	170cm	#a08502	2005	188cm
6	2013	NaN	2030	#ffffffd	168cm	grn	1928	705547886
7	2019	219	2029	#602927	163cm	oth	1943	016251942
8	2010	NaN	2026	#efcc98	184cm	gry	1942	117647952
9	2011	243	2027	#888785	154cm	blu	1962	362697676
10	2016	NaN	2030	#435634	154cm	blu	1965	779104554
11	1993	NaN	1996	z	62cm	zzz	2017	#50f768
12	2016	NaN	2030	#cfa07d	167cm	grn	1988	951967790
13	2018	281	2033	#06a58b	76cm	zzz	2004	320348494
14	2016	83	2028	#341e13	179cm	brn	1941	806979833
15	2018	NaN	2025	#866857	70in	oth	2000	203320330
16	2014	228	2035	#0ec4fe	70cm	#c8533a	2015	#218eb5
17	2017	330	2020	#6b5442	173cm	hzl	1988	173148327
18	2011	NaN	2028	#c0946f	83	grn	1964	931162400
19	2015	163	2027	#efcc98	154cm	oth	1972	838964596
20	2020	NaN	2028	#623a2f	181cm	blu	1976	853714682
21	2013	225	2025	#a97842	173cm	blu	1957	511588647
22	2016	220	2028	#efcc98	177cm	oth	1993	871652492
23	2018	57	2028	#733820	165cm	hzl	1973	018982018
24	2012	NaN	2040	#b6652a	175cm	#c85046	1981	491710153
25	2011	NaN	2028	#9d2ec4	63in	blu	1960	149288934
26	2014	221	2024	#7d3b0c	193cm	oth	1923	705818464
27	2011	NaN	2030	#ceb3a1	157cm	blu	1967	117111015
28	1976	277	2029	#341e13	159in	#6c7644	1965	157cm
29	2018	NaN	2020	#f5dfb9	188cm	brn	1980	787186482
30	2013	168	2023	#07c809	169cm	gry	1945	250679100
31	2013	NaN	2023	#6b5442	171cm	hzl	1965	683134187
32	2016	314	2028	#602927	180cm	blu	1952	720794393
33	2016	NaN	2027	#ddbf30	156cm	brn	1982	185583837
34	2013	NaN	2026	#ceb3a1	175cm	grn	1988	987624973
35	2015	NaN	2028	#a97842	160cm	oth	1974	350988773
36	2013	NaN	2028	#b6652a	156cm	gry	1970	717504683
37	2015	132	2025	#a97842	175cm	hzl	1986	453874703
38	2015	NaN	2026	#7d3b0c	154cm	brn	1959	580659686
39	2018	NaN	2023	#c0946f	191cm	amb	1994	681417707
40	2018	89	2022	#a97842	184cm	blu	1987	302326561

41	2011	NaN	2020	#866857	159cm	blu	1959	457081226
42	2012	NaN	2026	#c0946f	176cm	blu	1964	524745721
43	2014	88	2027	#efcc98	189cm	blu	1974	679155617
44	2020	NaN	2029	#733820	190cm	blu	1935	509009432
45	2019	146	2024	#ffffffd	159cm	brn	1931	446558583
46	2014	NaN	2028	#efcc98	65cm	oth	1972	330588516
47	2017	197	2023	#0441c6	175cm	blu	1999	068138358
48	2018	NaN	2022	#866857	193cm	brn	1992	905992465
49	2010	NaN	2030	#c0946f	161cm	gry	1985	616639221
50	2011	260	2023	#a97842	172cm	hzl	1937	594747312
51	2015	83	2028	#ffffffd	157cm	brn	1928	134536806
52	2016	195	2027	#583d02	180cm	amb	1934	035433923
53	2010	130	1936	50e1a7	74cm	gmt	1969	82008848
54	2018	NaN	2020	#733820	174cm	hzl	1983	087167304
55	2013	NaN	2020	#888785	188cm	hzl	1972	593301831
56	2020	282	2029	#888785	170cm	oth	1942	014356555
57	2012	NaN	2028	#623a2f	165cm	oth	1966	558908746
58	2014	127	2020	#6b5442	188cm	oth	1994	#4f5b92
59	2020	NaN	2026	#18171d	153cm	brn	1932	101990935
60	2011	NaN	2029	#c0946f	157cm	utc	1981	545992967
61	2018	NaN	2027	#602927	178cm	grn	1929	256056759
62	2016	NaN	2027	#20799c	185cm	blu	1971	813526512
63	2021	NaN	2040	#7d3b0c	62cm	#dedf53	2013	5135078781
64	2013	269	2026	#53b66c	179cm	grn	1979	871628606
65	2019	51	2023	#af82df	183cm	gry	1972	908462345
66	2016	271	2025	z	157cm	hzl	1998	106942710
67	2011	NaN	2027	#c0946f	190cm	oth	1951	191542220
68	2018	328	2028	#a97842	165cm	hzl	1988	481250123
69	2026	NaN	2004	91236c	174	#a51d9c	2017	2538922220
70	1980	NaN	2013	#866857	70cm	dne	1950	780067045
71	2011	156	2021	#602927	154cm	gry	1981	902964474
72	2016	315	2023	#623a2f	156cm	brn	1997	339892714
73	2014	184	2024	#888785	73in	brn	1960	561655785
74	2018	NaN	1977	#ceb3a1	188cm	grt	2017	579663338
75	1988	343	2029	#888785	185cm	oth	2001	378073052
76	2020	346	2028	#b6652a	179cm	brn	1973	406853460
77	2013	235	2026	#ceb3a1	157cm	gry	1968	001798001
78	2018	NaN	2021	#b6652a	151cm	brn	1990	504383643
79	2015	237	2026	#888785	164cm	grn	1998	045813631
80	2015	212	2030	#733820	172cm	gry	1979	507769390
81	2015	138	2024	#efcc98	176cm	brn	1984	968062470
82	2015	NaN	2028	#733820	160cm	oth	1941	431922630
83	2017	294	2023	#602927	67in	grn	1969	720065302
84	2012	NaN	2024	#7d3b0c	174cm	gry	2002	296913847
85	2024	NaN	2023	bb7ace	188	#312118	2013	42057861
86	2012	349	2021	#602927	170cm	brn	1958	064919306
87	2013	NaN	2022	#cfa07d	151cm	hzl	1996	248168906

88	2013	301	2021	#ffffffd	183cm	brn	1970	806659387
89	2013	192	2027	#cfa07d	64cm	#5ad460	1984	001255475
90	2012	NaN	2028	#733820	158cm	oth	2000	194936105
91	2019	323	2027	#a97842	191cm	grn	1987	625573908
92	2013	113	2024	#888785	193cm	hzl	1983	997956152
93	2017	NaN	2025	#733820	153cm	blu	1984	138608494
94	2013	266	2023	#623a2f	174cm	brn	1987	459148475
95	2017	NaN	2027	#b6652a	193cm	brn	2000	469155516
96	2016	NaN	2028	#18171d	74in	gry	1967	064940030
97	2020	NaN	2022	#efcc98	164cm	hzl	1968	834180009
98	2018	NaN	2022	#341e13	67in	oth	1978	021397352
99	2016	235	2022	#7d3b0c	73in	hzl	1964	454188395
100	1930	NaN	2033	#6b5442	76cm	utc	2028	41117341
101	2010	NaN	2027	#cfa07d	179cm	grn	1965	41316572
102	2027	NaN	1989	9993d6	152cm	zzz	2005	886168412
103	2010	NaN	2030	#18171d	166cm	brn	1922	661569613
104	2019	NaN	2020	#18171d	190cm	blu	1958	978855125
105	2012	NaN	2028	#ceb3a1	68in	oth	1975	067088299
106	2016	NaN	2020	#ffffffd	156cm	blu	1957	507464869
107	2020	259	2025	#623a2f	167cm	gry	1954	832017347
108	2015	NaN	2021	#a97842	69in	oth	1947	426496916
109	2017	192	2025	#a7ecdc	154cm	blu	1920	543125976
110	2017	349	2029	#6b5442	69in	hzl	1932	494399909
111	2010	100	2030	#6b5442	67in	gry	1938	477259022
112	2015	315	1920	#b6652a	145	dne	2009	180cm
113	2010	NaN	2022	#b6652a	65in	blu	1930	671271699
114	2013	72	2020	#341e13	189cm	hzl	1989	625435489
115	2025	111	2038	z	184	#a1368a	2025	7952164402
116	2015	NaN	1987	453b30	75cm	amb	1960	165478949
117	2014	259	2024	#623a2f	167cm	gry	1932	360279704
118	2011	275	2027	#4a4252	191cm	oth	1937	070592110
119	2017	256	2027	#341e13	150cm	blu	1923	152140902
120	2020	NaN	1972	#888098	188cm	gry	1974	586853292
121	2014	NaN	2020	#866857	184cm	brn	1999	422142863
122	2025	NaN	1928	#18171d	62cm	amb	2008	42120034
123	2017	85	2026	#602927	68in	amb	1923	922322363
124	2011	NaN	2025	#9c166d	174cm	blu	1946	834335216
125	2027	NaN	2026	z	70in	blu	1998	186cm
126	2010	240	2020	#623a2f	169cm	amb	1957	743059641
127	2014	97	2030	#602927	151cm	oth	1968	447599233
128	2012	188	2028	#6b5442	75in	gry	1941	621084188
129	2024	321	2039	#c0946f	66cm	amb	2022	185cm
130	2010	137	2020	#341e13	177cm	amb	1954	445374119
131	2012	NaN	2021	#18171d	160cm	grn	1923	286304911
132	2014	294	2030	#623a2f	181cm	oth	1969	817081355
133	2011	241	2025	#b6652a	177cm	gry	1991	446342686
134	2018	306	2021	#18171d	188cm	gry	1999	473752814



135	2011	50	2027	#b6652a	164cm	hzt	1969	433963708
136	2019	274	2020	#866857	64in	hzt	1948	857547233
137	2019	NaN	2022	#602927	183cm	oth	1936	557280094
138	2011	266	2021	#ceb3a1	166cm	blu	1993	682285472
139	2019	276	2029	#cfa07d	74in	amb	1926	387564370
140	2010	NaN	2026	#733820	179cm	brn	1997	230583200
141	2011	NaN	2024	#866857	150cm	#87b6f4	1946	298537901
142	2018	164	2022	#cfa07d	167cm	oth	1961	230816154
143	2010	NaN	2023	#18171d	173cm	amb	1960	167899852
144	2020	61	2025	#866857	165cm	hzt	2002	325078465
145	2011	268	2030	#a97842	173cm	gry	1966	450468785
146	2011	101	2026	#92e796	186cm	amb	1920	503853254
147	2026	NaN	2022	#7d3b0c	64in	amb	1924	536474715
148	2016	NaN	2030	#888785	72in	hzt	1977	048654766
149	2011	243	2023	#623a2f	183cm	oth	1920	998276626
150	2015	NaN	2030	#9c12d8	157cm	amb	1934	896953299
151	2011	NaN	2024	#cfa07d	168cm	grn	1974	451819357
152	2018	203	2029	#ffffffd	76in	amb	1936	908304519
153	2017	NaN	2026	#ceb3a1	186cm	grn	1967	594830518
154	2024	NaN	2037	z	153cm	zzz	2026	20921789
155	2016	323	2029	#888785	163cm	gry	1958	118638859
156	2011	273	2020	#ffffffd	167cm	brn	1988	557999801
157	2015	78	2020	#6b5442	170cm	oth	1931	039713280
158	2012	184	2024	#866857	162cm	amb	2002	696390563
159	2012	NaN	2029	#602927	189cm	oth	1992	712592503
160	1953	327	2003	z	62in	utc	1954	#97c11a
161	2020	252	2012	298df8	103	oth	1934	98689392
162	2015	NaN	2020	#ffffffd	159cm	brn	1993	338398225
163	2010	224	2024	#7d3b0c	163cm	grn	1971	631469024
164	2017	NaN	2020	#623a2f	167cm	hzt	1949	417970460
165	2014	336	2025	#733820	182cm	oth	1996	736143470
166	2019	126	2022	#623a2f	69in	grn	1935	638479310
167	2020	240	2023	#049f0e	174cm	brn	1987	804066884
168	2010	70	2023	#341e13	61in	amb	1974	200411701
169	2020	NaN	2029	#1c52f4	189cm	blu	1928	874302209
170	2030	NaN	2007	8e8916	137	utc	2026	166cm
171	2011	NaN	2030	#7d3b0c	166cm	amb	2002	671017167
172	2013	90	2020	#341e13	154cm	hzt	1955	369327568
173	1947	NaN	1977	z	75cm	amb	2003	169149205
174	2016	186	2022	#cfa07d	173cm	brn	1999	941218673
175	2011	222	2021	#efcc98	159cm	blu	1962	792538993
176	1977	NaN	2010	b98ff6	71	#875a67	2024	#994231
177	2018	NaN	1942	z	62cm	dne	2019	5866040917
178	2010	NaN	2027	#cfa07d	157cm	amb	1948	153547581
179	2019	322	2026	#733820	188cm	blu	1942	368975422
180	2020	NaN	2027	#18171d	193cm	brn	1994	535822939
181	2013	304	2021	#7d3b0c	152cm	grn	1972	706755664

182	2014	324	2028	53b08b	163cm	brn	1922	852815945
183	2016	NaN	2027	#a97842	74in	blu	1995	567155642
184	2017	273	2020	#efcc98	193cm	gry	1952	782403650
185	2013	306	2021	#c0946f	154cm	blu	1963	639445576
186	2019	178	2021	#733820	155cm	brn	2017	714110829
187	2012	203	2024	#866857	172cm	grn	1965	455383907
188	2018	NaN	2033	#c0946f	160cm	amb	1974	462538213
189	2030	NaN	2021	#866857	191cm	utc	2016	654088396
190	2012	NaN	2027	#6b5442	72in	brn	1990	476691172
191	2012	185	2022	#b59662	170cm	blu	1993	397461435
192	2017	NaN	2036	z	185cm	hzl	2015	172cm
193	2019	113	2029	#866857	181cm	oth	2000	045077916
194	2013	NaN	2025	#6b5442	191cm	grn	1953	717028913
195	2010	NaN	2027	#6b5442	163cm	amb	1941	825834003
196	2018	NaN	2026	#e9ebf8	59in	grn	1966	677886127
197	2011	153	2029	#888785	76in	hzl	1991	771218458
198	2013	NaN	2020	#888785	161cm	brn	1928	913959218
199	2017	NaN	2026	#733820	188cm	blu	1964	874400552
200	2017	59	2028	#602927	177cm	hzl	1964	130750853
201	2019	NaN	2026	#c0946f	189cm	gry	1971	741121671
202	2017	NaN	2028	#888785	191cm	amb	1952	060053163
203	2015	NaN	2021	#18171d	68in	oth	1938	888616887
204	2018	NaN	2026	#efcc98	192cm	oth	1990	472330538
205	2014	64	2027	#18171d	165cm	blu	1998	601177268
206	2011	188	2028	#c0946f	154cm	grn	1987	440822084
207	2022	NaN	2040	z	71cm	#bb3dce	1965	88829820
208	2014	NaN	2025	#18171d	151cm	grn	1989	054717793
209	2016	297	2027	#cfa07d	173in	grn	1932	071196833
210	2011	NaN	2026	#6b1c3d	175cm	oth	1961	963034490
211	2016	NaN	2023	#b6652a	69in	oth	1960	771661551
212	1966	63	1931	dc9531	101	#252d02	2021	190cm
213	2014	283	2024	#cfa07d	182cm	amb	1983	307867769
214	2015	330	2026	#ceb3a1	157cm	oth	1926	109243500
215	2016	NaN	2023	#602927	68in	brn	1940	389818848
216	2011	NaN	2020	#ffffffd	175cm	brn	2001	340990019
217	2013	264	2027	#888785	154cm	amb	1929	128094068
218	2018	270	2020	#602927	156cm	gry	1983	621875145
219	2019	345	1976	35d6e4	109	grt	1992	68093057
220	2020	NaN	2027	#733820	153cm	grn	1996	714839913
221	2015	NaN	2027	#866857	167cm	grn	1957	820650878
222	2015	326	2021	#ceb3a1	151cm	amb	1936	600488426
223	2014	256	2028	#733820	169cm	brn	1982	261369952
224	2011	257	2021	#3bbbd5	166cm	amb	1998	745066100
225	2010	103	2026	#a97842	160cm	gry	2000	528503931
226	2011	131	2025	#cc0362	168cm	brn	2001	346722892
227	2012	NaN	2020	#ceb3a1	188cm	oth	1985	760916817
228	2018	317	2028	#733820	179cm	amb	1982	411265118

229	2020	NaN	2021	#7d3b0c	155cm	gry	1927	937138356
230	2019	NaN	2030	#18171d	157cm	blu	1974	715207875
231	2018	154	2022	#cfa07d	159cm	gry	1938	134624402
232	2019	259	2021	#cfa07d	189cm	oth	1958	0484880795
233	2010	NaN	2025	#52a9af	151cm	amb	1960	752967111
234	2016	232	2029	#733820	193cm	oth	1942	175cm
235	2011	NaN	2028	#b6652a	153cm	blu	1990	054326137
236	2012	NaN	2023	#18171d	181cm	grn	1933	659875882
237	2019	NaN	2023	#866857	193cm	grn	1946	494553757
238	2010	331	2021	#733820	174cm	blu	1950	405416908

[6]: `display(Latex(r"\newpage"))`

## 4.0.2 Part 2

```
[90]: pd.DataFrame(valid_passports_2)
```

```
[90]:
```

	byr	eyr	hcl	iyr	pid	hgt	ec1	cid
0	1991	2022	#341e13	2016	729933757	167cm	gry	NaN
1	1930	2022	#ffffffd	2018	781914826	172cm	gry	NaN
2	1942	2028	#08df7e	2011	319110455	186cm	grn	141
3	1928	2030	#ffffffd	2013	705547886	168cm	grn	NaN
4	1943	2029	#602927	2019	016251942	163cm	oth	219
5	1942	2026	#efcc98	2010	117647952	184cm	gry	NaN
6	1962	2027	#888785	2011	362697676	154cm	blu	243
7	1965	2030	#435634	2016	779104554	154cm	blu	NaN
8	1988	2030	#cfa07d	2016	951967790	167cm	grn	NaN
9	1941	2028	#341e13	2016	806979833	179cm	brn	83
10	2000	2025	#866857	2018	203320330	70in	oth	NaN
11	1988	2020	#6b5442	2017	173148327	173cm	hzl	330
12	1972	2027	#efcc98	2015	838964596	154cm	oth	163
13	1976	2028	#623a2f	2020	853714682	181cm	blu	NaN
14	1957	2025	#a97842	2013	511588647	173cm	blu	225
15	1993	2028	#efcc98	2016	871652492	177cm	oth	220
16	1973	2028	#733820	2018	018982018	165cm	hzl	57
17	1960	2028	#9d2ec4	2011	149288934	63in	blu	NaN
18	1923	2024	#7d3b0c	2014	705818464	193cm	oth	221
19	1967	2030	#ceb3a1	2011	117111015	157cm	blu	NaN
20	1980	2020	#f5dfb9	2018	787186482	188cm	brn	NaN
21	1945	2023	#07c809	2013	250679100	169cm	gry	168
22	1965	2023	#6b5442	2013	683134187	171cm	hzl	NaN
23	1952	2028	#602927	2016	720794393	180cm	blu	314
24	1982	2027	#ddbf30	2016	185583837	156cm	brn	NaN
25	1988	2026	#ceb3a1	2013	987624973	175cm	grn	NaN
26	1974	2028	#a97842	2015	350988773	160cm	oth	NaN
27	1970	2028	#b6652a	2013	717504683	156cm	gry	NaN
28	1986	2025	#a97842	2015	453874703	175cm	hzl	132
29	1959	2026	#7d3b0c	2015	580659686	154cm	brn	NaN
30	1994	2023	#c0946f	2018	681417707	191cm	amb	NaN
31	1987	2022	#a97842	2018	302326561	184cm	blu	89
32	1959	2020	#866857	2011	457081226	159cm	blu	NaN
33	1964	2026	#c0946f	2012	524745721	176cm	blu	NaN
34	1974	2027	#efcc98	2014	679155617	189cm	blu	88
35	1935	2029	#733820	2020	509009432	190cm	blu	NaN
36	1931	2024	#ffffffd	2019	446558583	159cm	brn	146
37	1999	2023	#0441c6	2017	068138358	175cm	blu	197
38	1992	2022	#866857	2018	905992465	193cm	brn	NaN
39	1985	2030	#c0946f	2010	616639221	161cm	gry	NaN
40	1937	2023	#a97842	2011	594747312	172cm	hzl	260
41	1928	2028	#ffffffd	2015	134536806	157cm	brn	83
42	1934	2027	#583d02	2016	035433923	180cm	amb	195

43	1983	2020	#733820	2018	087167304	174cm	hzl	NaN
44	1972	2020	#888785	2013	593301831	188cm	hzl	NaN
45	1942	2029	#888785	2020	014356555	170cm	oth	282
46	1966	2028	#623a2f	2012	558908746	165cm	oth	NaN
47	1932	2026	#18171d	2020	101990935	153cm	brn	NaN
48	1929	2027	#602927	2018	256056759	178cm	grn	NaN
49	1971	2027	#20799c	2016	813526512	185cm	blu	NaN
50	1979	2026	#53b66c	2013	871628606	179cm	grn	269
51	1972	2023	#af82df	2019	908462345	183cm	gry	51
52	1951	2027	#c0946f	2011	191542220	190cm	oth	NaN
53	1988	2028	#a97842	2018	481250123	165cm	hzl	328
54	1981	2021	#602927	2011	902964474	154cm	gry	156
55	1997	2023	#623a2f	2016	339892714	156cm	brn	315
56	1960	2024	#888785	2014	561655785	73in	brn	184
57	1973	2028	#b6652a	2020	406853460	179cm	brn	346
58	1968	2026	#ceb3a1	2013	001798001	157cm	gry	235
59	1990	2021	#b6652a	2018	504383643	151cm	brn	NaN
60	1998	2026	#888785	2015	045813631	164cm	grn	237
61	1979	2030	#733820	2015	507769390	172cm	gry	212
62	1984	2024	#efcc98	2015	968062470	176cm	brn	138
63	1941	2028	#733820	2015	431922630	160cm	oth	NaN
64	1969	2023	#602927	2017	720065302	67in	grn	294
65	2002	2024	#7d3b0c	2012	296913847	174cm	gry	NaN
66	1958	2021	#602927	2012	064919306	170cm	brn	349
67	1996	2022	#cfa07d	2013	248168906	151cm	hzl	NaN
68	1970	2021	#fffffd	2013	806659387	183cm	brn	301
69	2000	2028	#733820	2012	194936105	158cm	oth	NaN
70	1987	2027	#a97842	2019	625573908	191cm	grn	323
71	1983	2024	#888785	2013	997956152	193cm	hzl	113
72	1984	2025	#733820	2017	138608494	153cm	blu	NaN
73	1987	2023	#623a2f	2013	459148475	174cm	brn	266
74	2000	2027	#b6652a	2017	469155516	193cm	brn	NaN
75	1967	2028	#18171d	2016	064940030	74in	gry	NaN
76	1968	2022	#efcc98	2020	834180009	164cm	hzl	NaN
77	1978	2022	#341e13	2018	021397352	67in	oth	NaN
78	1964	2022	#7d3b0c	2016	454188395	73in	hzl	235
79	1922	2030	#18171d	2010	661569613	166cm	brn	NaN
80	1958	2020	#18171d	2019	978855125	190cm	blu	NaN
81	1975	2028	#ceb3a1	2012	067088299	68in	oth	NaN
82	1957	2020	#fffffd	2016	507464869	156cm	blu	NaN
83	1954	2025	#623a2f	2020	832017347	167cm	gry	259
84	1947	2021	#a97842	2015	426496916	69in	oth	NaN
85	1920	2025	#a7ecdc	2017	543125976	154cm	blu	192
86	1932	2029	#6b5442	2017	494399909	69in	hzl	349
87	1938	2030	#6b5442	2010	477259022	67in	gry	100
88	1930	2022	#b6652a	2010	671271699	65in	blu	NaN
89	1989	2020	#341e13	2013	625435489	189cm	hzl	72

90	1932	2024	#623a2f	2014	360279704	167cm	gry	259
91	1937	2027	#4a4252	2011	070592110	191cm	oth	275
92	1923	2027	#341e13	2017	152140902	150cm	blu	256
93	1999	2020	#866857	2014	422142863	184cm	brn	NaN
94	1923	2026	#602927	2017	922322363	68in	amb	85
95	1946	2025	#9c166d	2011	834335216	174cm	blu	NaN
96	1957	2020	#623a2f	2010	743059641	169cm	amb	240
97	1968	2030	#602927	2014	447599233	151cm	oth	97
98	1941	2028	#6b5442	2012	621084188	75in	gry	188
99	1954	2020	#341e13	2010	445374119	177cm	amb	137
100	1923	2021	#18171d	2012	286304911	160cm	grn	NaN
101	1969	2030	#623a2f	2014	817081355	181cm	oth	294
102	1991	2025	#b6652a	2011	446342686	177cm	gry	241
103	1999	2021	#18171d	2018	473752814	188cm	gry	306
104	1969	2027	#b6652a	2011	433963708	164cm	hzl	50
105	1948	2020	#866857	2019	857547233	64in	hzl	274
106	1936	2022	#602927	2019	557280094	183cm	oth	NaN
107	1993	2021	#ceb3a1	2011	682285472	166cm	blu	266
108	1926	2029	#cfa07d	2019	387564370	74in	amb	276
109	1997	2026	#733820	2010	230583200	179cm	brn	NaN
110	1961	2022	#cfa07d	2018	230816154	167cm	oth	164
111	1960	2023	#18171d	2010	167899852	173cm	amb	NaN
112	2002	2025	#866857	2020	325078465	165cm	hzl	61
113	1966	2030	#a97842	2011	450468785	173cm	gry	268
114	1920	2026	#92e796	2011	503853254	186cm	amb	101
115	1977	2030	#888785	2016	048654766	72in	hzl	NaN
116	1920	2023	#623a2f	2011	998276626	183cm	oth	243
117	1934	2030	#9c12d8	2015	896953299	157cm	amb	NaN
118	1974	2024	#cfa07d	2011	451819357	168cm	grn	NaN
119	1936	2029	#ffffffd	2018	908304519	76in	amb	203
120	1967	2026	#ceb3a1	2017	594830518	186cm	grn	NaN
121	1958	2029	#888785	2016	118638859	163cm	gry	323
122	1988	2020	#ffffffd	2011	557999801	167cm	brn	273
123	1931	2020	#6b5442	2015	039713280	170cm	oth	78
124	2002	2024	#866857	2012	696390563	162cm	amb	184
125	1992	2029	#602927	2012	712592503	189cm	oth	NaN
126	1993	2020	#ffffffd	2015	338398225	159cm	brn	NaN
127	1971	2024	#7d3b0c	2010	631469024	163cm	grn	224
128	1949	2020	#623a2f	2017	417970460	167cm	hzl	NaN
129	1996	2025	#733820	2014	736143470	182cm	oth	336
130	1935	2022	#623a2f	2019	638479310	69in	grn	126
131	1987	2023	#049f0e	2020	804066884	174cm	brn	240
132	1974	2023	#341e13	2010	200411701	61in	amb	70
133	1928	2029	#1c52f4	2020	874302209	189cm	blu	NaN
134	2002	2030	#7d3b0c	2011	671017167	166cm	amb	NaN
135	1955	2020	#341e13	2013	369327568	154cm	hzl	90
136	1999	2022	#cfa07d	2016	941218673	173cm	brn	186

137	1962	2021	#efcc98	2011	792538993	159cm	blu	222
138	1948	2027	#cfa07d	2010	153547581	157cm	amb	NaN
139	1942	2026	#733820	2019	368975422	188cm	blu	322
140	1994	2027	#18171d	2020	535822939	193cm	brn	NaN
141	1972	2021	#7d3b0c	2013	706755664	152cm	grn	304
142	1995	2027	#a97842	2016	567155642	74in	blu	NaN
143	1952	2020	#efcc98	2017	782403650	193cm	gry	273
144	1963	2021	#c0946f	2013	639445576	154cm	blu	306
145	1965	2024	#866857	2012	455383907	172cm	grn	203
146	1990	2027	#6b5442	2012	476691172	72in	brn	NaN
147	1993	2022	#b59662	2012	397461435	170cm	blu	185
148	2000	2029	#866857	2019	045077916	181cm	oth	113
149	1953	2025	#6b5442	2013	717028913	191cm	grn	NaN
150	1941	2027	#6b5442	2010	825834003	163cm	amb	NaN
151	1966	2026	#e9ebf8	2018	677886127	59in	grn	NaN
152	1991	2029	#888785	2011	771218458	76in	hzl	153
153	1928	2020	#888785	2013	913959218	161cm	brn	NaN
154	1964	2026	#733820	2017	874400552	188cm	blu	NaN
155	1964	2028	#602927	2017	130750853	177cm	hzl	59
156	1971	2026	#c0946f	2019	741121671	189cm	gry	NaN
157	1952	2028	#888785	2017	060053163	191cm	amb	NaN
158	1938	2021	#18171d	2015	888616887	68in	oth	NaN
159	1990	2026	#efcc98	2018	472330538	192cm	oth	NaN
160	1998	2027	#18171d	2014	601177268	165cm	blu	64
161	1987	2028	#c0946f	2011	440822084	154cm	grn	188
162	1989	2025	#18171d	2014	054717793	151cm	grn	NaN
163	1961	2026	#6b1c3d	2011	963034490	175cm	oth	NaN
164	1960	2023	#b6652a	2016	771661551	69in	oth	NaN
165	1983	2024	#cfa07d	2014	307867769	182cm	amb	283
166	1926	2026	#ceb3a1	2015	109243500	157cm	oth	330
167	1940	2023	#602927	2016	389818848	68in	brn	NaN
168	2001	2020	#ffffffd	2011	340990019	175cm	brn	NaN
169	1929	2027	#888785	2013	128094068	154cm	amb	264
170	1983	2020	#602927	2018	621875145	156cm	gry	270
171	1996	2027	#733820	2020	714839913	153cm	grn	NaN
172	1957	2027	#866857	2015	820650878	167cm	grn	NaN
173	1936	2021	#ceb3a1	2015	600488426	151cm	amb	326
174	1982	2028	#733820	2014	261369952	169cm	brn	256
175	1998	2021	#3bbbd5	2011	745066100	166cm	amb	257
176	2000	2026	#a97842	2010	528503931	160cm	gry	103
177	2001	2025	#cc0362	2011	346722892	168cm	brn	131
178	1985	2020	#ceb3a1	2012	760916817	188cm	oth	NaN
179	1982	2028	#733820	2018	411265118	179cm	amb	317
180	1927	2021	#7d3b0c	2020	937138356	155cm	gry	NaN
181	1974	2030	#18171d	2019	715207875	157cm	blu	NaN
182	1938	2022	#cfa07d	2018	134624402	159cm	gry	154
183	1960	2025	#52a9af	2010	752967111	151cm	amb	NaN

184	1990	2028	#b6652a	2011	054326137	153cm	blu	NaN
185	1933	2023	#18171d	2012	659875882	181cm	grn	NaN
186	1946	2023	#866857	2019	494553757	193cm	grn	NaN
187	1950	2021	#733820	2010	405416908	174cm	blu	331