

```
In [1]: # 1. Ładowanie biblioteki Pandas  
#zimportuj moduł pyplot z biblioteki matplotlib  
import pandas as pd  
import matplotlib.pyplot as plt
```

```
In [2]: # 2. tworzenie ramki danych ze słownika  
data = {'Name': ['Anna', 'Bob', 'Charles'],  
        'Surname': ['Kubus', 'Kowal', 'Zajety'],  
        'Age': [22, 33, 44]}  
ramka1 = pd.DataFrame(data)
```

```
In [3]: # 3. zachowanie ramki danych pobranych z pliku w formacie csv (xlsx)  
ramka1.to_csv('data1.csv', index=False)
```

```
In [4]: # 4. tworzenie ramki danych z listy list  
data_list = [  
    ['Anna', 'Kubus', 22],  
    ['Bob', 'Kowal', 33],  
    ['Charles', 'Zajety', 44]  
]  
columns = ['Name', 'Surname', 'Age']  
ramka2 = pd.DataFrame(data_list, columns=columns)
```

```
In [6]: # 5. transponowanie (wymieniamy kolumny a wierszy)  
df_transposed = ramka2.T
```

```
In [7]: # 6. wyświetlic pierwsze 10 wierszy ramki danych  
df = pd.read_csv("IHME_PREM_WMN_HEALTH_2020_Y2011M10D11.csv") # ładowanie ramki  
print(df.head(10))
```

| | observation_id | submitted_time | gender | \ | |
|---|---|----------------------------------|--------------------------|-----|---|
| 0 | wmn_4503683847159808 | 2020-07-09 23:19:01.982 UTC | Female | | |
| 1 | wmn_4503772699295744 | 2020-07-09 21:22:15.864 UTC | Female | | |
| 2 | wmn_4504010469146624 | 2020-07-10 05:09:07.359 UTC | Female | | |
| 3 | wmn_4504035500752896 | 2020-07-11 16:59:49.85 UTC | Female | | |
| 4 | wmn_4504181395423232 | 2020-07-11 18:43:35.954 UTC | Female | | |
| 5 | wmn_4504301990051840 | 2020-07-10 11:27:16.581 UTC | Female | | |
| 6 | wmn_4504322055602176 | 2020-07-09 20:43:11.055 UTC | Female | | |
| 7 | wmn_4504369904222208 | 2020-07-18 12:52:31.482 UTC | Female | | |
| 8 | wmn_4504469091123200 | 2020-07-16 16:03:44.066 UTC | Female | | |
| 9 | wmn_4504687899574272 | 2020-07-17 07:16:32.082 UTC | Female | | |
| | age | geography | \ | | |
| 0 | 26 to 35 years old | City center or metropolitan area | | | |
| 1 | 16 to 25 years old | Rural | | | |
| 2 | 16 to 25 years old | Rural | | | |
| 3 | 16 to 25 years old | Suburban/Peri-urban | | | |
| 4 | 26 to 35 years old | Suburban/Peri-urban | | | |
| 5 | 26 to 35 years old | City center or metropolitan area | | | |
| 6 | 16 to 25 years old | City center or metropolitan area | | | |
| 7 | 16 to 25 years old | Suburban/Peri-urban | | | |
| 8 | 36 to 45 years old | City center or metropolitan area | | | |
| 9 | 36 to 45 years old | City center or metropolitan area | | | |
| | financial_situation | education | \ | | |
| 0 | I cannot afford enough food for my family | College or university | | | |
| 1 | I cannot afford enough food for my family | Secondary/high school | | | |
| 2 | I can afford food, but nothing else | College or university | | | |
| 3 | I can afford food and regular expenses, and bu... | College or university | | | |
| 4 | I can afford food and regular expenses, and bu... | College or university | | | |
| 5 | I can comfortably afford food, clothes, and fu... | College or university | | | |
| 6 | I can afford food and regular expenses, and bu... | College or university | | | |
| 7 | I cannot afford enough food for my family | College or university | | | |
| 8 | I can afford food and regular expenses, but no... | College or university | | | |
| 9 | I can afford food and regular expenses, but no... | College or university | | | |
| | employment_status | ethnicity | religion | ... | \ |
| 0 | Unemployed | Mestizo | Catholicism | ... | |
| 1 | Student | Tagalog | Muslim | ... | |
| 2 | Student | Hiligaynon | Christianity | ... | |
| 3 | Unemployed | Thai | Buddhism | ... | |
| 4 | Employed full-time | African | Christianity | ... | |
| 5 | Employed full-time | Bisaya | Christianity | ... | |
| 6 | Employed full-time | Tagalog | Christianity | ... | |
| 7 | Student | Shona | Other | ... | |
| 8 | Employed part-time | Serer | Muslim | ... | |
| 9 | Self-employed | Non-hispanic White | Mormonism | ... | |
| | wmn_pre_safe_place | wmn_post_safe_place | wmn_safe_place_no_access | \ | |
| 0 | Nan | Nan | Nan | | |
| 1 | Nan | Nan | Nan | | |
| 2 | Nan | Nan | Nan | | |
| 3 | Nan | Nan | Nan | | |
| 4 | Nan | Nan | Nan | | |
| 5 | Nan | Nan | Nan | | |
| 6 | Nan | Nan | Nan | | |
| 7 | Nan | Nan | Nan | | |
| 8 | Nan | Nan | Nan | | |
| 9 | Nan | Nan | Nan | | |

```
wmn_safe_place_no_access_why wmn_pre_help wmn_post_help wmn_post_no_help \
0           NaN      NaN      NaN      NaN
1           NaN      NaN      NaN      NaN
2           NaN      NaN      NaN      NaN
3           NaN      NaN      NaN      NaN
4           NaN      NaN      NaN      NaN
5           NaN      NaN      NaN      NaN
6           NaN      NaN      NaN      NaN
7           NaN      No       No       No
8           NaN      NaN      NaN      NaN
9           NaN      NaN      NaN      NaN

wmn_no_help_why                  country          user_id
0     NaN        Ecuador  wmn_5900473574883328
1     NaN        Philippines  wmn_5702261783658496
2     NaN        Philippines  wmn_5652767014387712
3     NaN        Thailand  wmn_6411372690669568
4     NaN United Republic of Tanzania  wmn_6215734184378368
5     NaN        Philippines  wmn_6132893427433472
6     NaN        Philippines  wmn_5846766880817152
7     NaN        Zimbabwe  wmn_5063488921927680
8     NaN        Senegal  wmn_6660892420997120
9     NaN        United States  wmn_6376829706829824

[10 rows x 46 columns]
```

```
In [8]: # 7. wyswietlic ostatnie 10 wierszy ramki danych
print(df.tail(10))
```

| | observation_id | submitted_time | gender | \ |
|-------|---|--|--------------------|-----|
| 12344 | wmn_6752309616050176 | 2020-07-11 14:37:07.551 UTC | Female | |
| 12345 | wmn_6752631872815104 | 2020-07-10 02:25:50.01 UTC | Female | |
| 12346 | wmn_6752968893530112 | 2020-07-14 05:19:46.429 UTC | Female | |
| 12347 | wmn_6753819934588928 | 2020-07-25 17:34:27.837 UTC | Female | |
| 12348 | wmn_6753897143336960 | 2020-07-10 11:49:14.64 UTC | Female | |
| 12349 | wmn_6754210441068544 | 2020-07-16 15:46:12.095 UTC | Female | |
| 12350 | wmn_6754415891709952 | 2020-07-10 09:57:24.863 UTC | Female | |
| 12351 | wmn_6754483574145024 | 2020-07-19 17:50:01.295 UTC | Female | |
| 12352 | wmn_6755256899993600 | 2020-07-11 16:09:09.78 UTC | Female | |
| 12353 | wmn_6755376524689408 | 2020-07-17 03:19:00.388 UTC | Female | |
| | age | geography | \ | |
| 12344 | 26 to 35 years old | City center or metropolitan area | | |
| 12345 | 26 to 35 years old | City center or metropolitan area | | |
| 12346 | 16 to 25 years old | City center or metropolitan area | | |
| 12347 | 26 to 35 years old | Suburban/Peri-urban | | |
| 12348 | 26 to 35 years old | Suburban/Peri-urban | | |
| 12349 | 26 to 35 years old | Suburban/Peri-urban | | |
| 12350 | 16 to 25 years old | City center or metropolitan area | | |
| 12351 | 26 to 35 years old | City center or metropolitan area | | |
| 12352 | 36 to 45 years old | Rural | | |
| 12353 | 26 to 35 years old | City center or metropolitan area | | |
| | financial_situation | \ | | |
| 12344 | I can comfortably afford food, clothes, and fu... | | | |
| 12345 | I can afford food and regular expenses, but no... | | | |
| 12346 | I can afford food and regular expenses, and bu... | | | |
| 12347 | I can afford food and regular expenses, but no... | | | |
| 12348 | I can afford food and regular expenses, but no... | | | |
| 12349 | I can afford food and regular expenses, but no... | | | |
| 12350 | I can afford food and regular expenses, but no... | | | |
| 12351 | I can afford food and regular expenses, but no... | | | |
| 12352 | I can comfortably afford food, clothes, and fu... | | | |
| 12353 | I can afford food and regular expenses, and bu... | | | |
| | education | employment_status | ethnicity | \ |
| 12344 | Post graduate | Employed full-time | Mestizo | |
| 12345 | College or university | Unemployed | Tagalog | |
| 12346 | Secondary/high school | Employed full-time | Prefer not to say | |
| 12347 | College or university | Unemployed | Non-hispanic White | |
| 12348 | Technical school | Employed full-time | Bisaya | |
| 12349 | College or university | Unemployed | African | |
| 12350 | Secondary/high school | Self-employed | Kru | |
| 12351 | Technical school | Unemployed | Non-hispanic White | |
| 12352 | College or university | Self-employed | Thai | |
| 12353 | Secondary/high school | Employed full-time | Mestizo | |
| | religion | ... wmn_pre_safe_place wmn_post_safe_place | \ | |
| 12344 | Catholicism | ... | NaN | NaN |
| 12345 | Other | ... | NaN | NaN |
| 12346 | Prefer Not To Answer | ... | NaN | NaN |
| 12347 | Catholicism | ... | NaN | NaN |
| 12348 | Christianity | ... | NaN | NaN |
| 12349 | Muslim | ... | NaN | NaN |
| 12350 | Catholicism | ... | NaN | NaN |
| 12351 | Prefer Not To Answer | Every day | Rarely | |
| 12352 | Buddhism | ... | NaN | NaN |
| 12353 | Catholicism | ... | NaN | NaN |

| | wmn_safe_place_no_access | wmn_safe_place_no_access_why | wmn_pre_help | \ |
|-------|--------------------------|------------------------------|--------------|-----|
| 12344 | NaN | | NaN | No |
| 12345 | NaN | | NaN | NaN |
| 12346 | NaN | | NaN | NaN |
| 12347 | NaN | | NaN | No |
| 12348 | NaN | | NaN | NaN |
| 12349 | NaN | | NaN | NaN |
| 12350 | NaN | | NaN | NaN |
| 12351 | No | | NaN | Yes |
| 12352 | NaN | | NaN | NaN |
| 12353 | NaN | | NaN | NaN |

| | wmn_post_help | wmn_post_no_help | wmn_no_help_why | \ |
|-------|---------------|------------------|-----------------------|-----|
| 12344 | No | No | | NaN |
| 12345 | NaN | NaN | | NaN |
| 12346 | NaN | NaN | | NaN |
| 12347 | No | No | | NaN |
| 12348 | NaN | NaN | | NaN |
| 12349 | NaN | NaN | | NaN |
| 12350 | NaN | NaN | | NaN |
| 12351 | Yes | | Yes Decline to Answer | |
| 12352 | NaN | NaN | | NaN |
| 12353 | NaN | NaN | | NaN |

| | country | user_id |
|-------|-----------------------------|----------------------|
| 12344 | Colombia | wmn_6066645730066432 |
| 12345 | Philippines | wmn_6585690490929152 |
| 12346 | Colombia | wmn_5979825287462912 |
| 12347 | United States | wmn_5447933365583872 |
| 12348 | Philippines | wmn_6192783355543552 |
| 12349 | United Republic of Tanzania | wmn_6151550260215808 |
| 12350 | Ivory Coast | wmn_5222308327456768 |
| 12351 | United States | wmn_4706368994148352 |
| 12352 | Thailand | wmn_6730228637892608 |
| 12353 | Ecuador | wmn_6585614141489152 |

[10 rows x 46 columns]

```
In [9]: # 8. wyswietlic informacje o ramce danych
print(df.info())
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 12354 entries, 0 to 12353
Data columns (total 46 columns):
 #   Column           Non-Null Count Dtype  
 --- 
 0   observation_id    12354 non-null  object  
 1   submitted_time     12354 non-null  object  
 2   gender             12354 non-null  object  
 3   age                12354 non-null  object  
 4   geography          12354 non-null  object  
 5   financial_situation 12354 non-null  object  
 6   education          12354 non-null  object  
 7   employment_status   12354 non-null  object  
 8   ethnicity          12354 non-null  object  
 9   religion            12354 non-null  object  
 10  wmn_hh              12354 non-null  object  
 11  wmn_pregnancy_desire 12354 non-null  object  
 12  wmn_pregnancy_change 11351 non-null  object  
 13  wmn_pregnancy_change_how 3030 non-null  object  
 14  wmn_con              12354 non-null  object  
 15  wmn_con_type         5426 non-null  object  
 16  wmn_pre_con_access_difficulty 3460 non-null  object  
 17  wmn_pre_missed_dose_pills    186 non-null  object  
 18  wmn_pre_con_needed        3185 non-null  object  
 19  wmn_pre_con_accessed      1825 non-null  object  
 20  wmn_pre_injectable_missed 94 non-null   float64 
 21  wmn_pre_iud_missed       75 non-null   float64 
 22  wmn_pre_con_missed_why    437 non-null  object  
 23  wmn_pre_con_missed_why_other 34 non-null  object  
 24  wmn_post_con_access_difficulty 3460 non-null  object  
 25  wmn_post_missed_dose_pills 184 non-null  object  
 26  wmn_post_con_needed       3133 non-null  object  
 27  wmn_post_con_accessed     1825 non-null  object  
 28  wmn_post_injectable_missed 110 non-null  float64 
 29  wmn_post_iud_missed       60 non-null   float64 
 30  wmn_post_con_missed_why    443 non-null  object  
 31  wmn_post_con_missed_why_other 23 non-null  object  
 32  wmn_alone               12354 non-null  object  
 33  wmn_how_safe             5282 non-null  object  
 34  wmn_safe_change          5282 non-null  object  
 35  wmn_safe_place           5282 non-null  object  
 36  wmn_pre_safe_place        2795 non-null  object  
 37  wmn_post_safe_place       2795 non-null  object  
 38  wmn_safe_place_no_access 2795 non-null  object  
 39  wmn_safe_place_no_access_why 849 non-null  object  
 40  wmn_pre_help              5282 non-null  object  
 41  wmn_post_help             5282 non-null  object  
 42  wmn_post_no_help          5282 non-null  object  
 43  wmn_no_help_why           848 non-null  object  
 44  country                  12354 non-null  object  
 45  user_id                  12354 non-null  object  

dtypes: float64(4), object(42)
memory usage: 4.3+ MB
None
```

In [10]: # 9. wyświetlic, ile wierszy i kolumn znajduje się, w ramce danych
print(df.shape)

(12354, 46)

```
In [11]: # 10. wyswietlic informacje, statystyczna, o kolumnach liczbowych (wartosci niepowtarzalne, srednia, odchylenie standardowe, minimum, kwartyle, maksimum)
```

```
print(df.describe())
```

| | wmn_pre_injectable_missed | wmn_pre_iud_missed |
|-------|----------------------------|---------------------|
| count | 94.000000 | 7.500000e+01 |
| mean | 214.765957 | 1.033763e+07 |
| std | 2062.634850 | 8.952644e+07 |
| min | 0.000000 | 0.000000e+00 |
| 25% | 1.000000 | 1.000000e+00 |
| 50% | 2.000000 | 2.000000e+00 |
| 75% | 2.750000 | 3.000000e+00 |
| max | 20000.000000 | 7.753217e+08 |
| | | |
| | wmn_post_injectable_missed | wmn_post_iud_missed |
| count | 110.000000 | 6.000000e+01 |
| mean | 232.845455 | 1.292203e+07 |
| std | 2418.242269 | 1.000936e+08 |
| min | 0.000000 | 0.000000e+00 |
| 25% | 1.000000 | 1.000000e+00 |
| 50% | 2.000000 | 2.000000e+00 |
| 75% | 3.000000 | 3.000000e+00 |
| max | 25365.000000 | 7.753217e+08 |

```
In [12]: # 11. wyswietlic informacje, statystyczna, o kolumnach kategoryzowanych (ile unikalnych wartosci, top - jaka jest najpopularniejsza wartosc, freq - jak często najpopularniejsza)
```

```
print(df['gender'].value_counts())
print(df['gender'].describe())
```

```
gender
Female           12331
Prefer not to answer    15
Not Available      8
Name: count, dtype: int64
count        12354
unique         3
top          Female
freq        12331
Name: gender, dtype: object
```

```
In [13]: # 12. usunac brakujace wartosci w ramce danych
df_cleaned = df.dropna()
```

```
In [14]: # 13. przedstawic wybor wierszy i kolumny uzywajac nazw oraz indeksow na rozne sposoby
print(df.iloc[0:11, 0:11])
```

| | observation_id | submitted_time | gender | \ |
|----|---|----------------------------------|---------------|--------|
| 0 | wmn_4503683847159808 | 2020-07-09 23:19:01.982 UTC | Female | |
| 1 | wmn_4503772699295744 | 2020-07-09 21:22:15.864 UTC | Female | |
| 2 | wmn_4504010469146624 | 2020-07-10 05:09:07.359 UTC | Female | |
| 3 | wmn_4504035500752896 | 2020-07-11 16:59:49.85 UTC | Female | |
| 4 | wmn_4504181395423232 | 2020-07-11 18:43:35.954 UTC | Female | |
| 5 | wmn_4504301990051840 | 2020-07-10 11:27:16.581 UTC | Female | |
| 6 | wmn_4504322055602176 | 2020-07-09 20:43:11.055 UTC | Female | |
| 7 | wmn_4504369904222208 | 2020-07-18 12:52:31.482 UTC | Female | |
| 8 | wmn_4504469091123200 | 2020-07-16 16:03:44.066 UTC | Female | |
| 9 | wmn_4504687899574272 | 2020-07-17 07:16:32.082 UTC | Female | |
| 10 | wmn_4504764873441280 | 2020-07-23 00:29:41.766 UTC | Female | |
| | age | geography | \ | |
| 0 | 26 to 35 years old | City center or metropolitan area | | |
| 1 | 16 to 25 years old | Rural | | |
| 2 | 16 to 25 years old | Rural | | |
| 3 | 16 to 25 years old | Suburban/Peri-urban | | |
| 4 | 26 to 35 years old | Suburban/Peri-urban | | |
| 5 | 26 to 35 years old | City center or metropolitan area | | |
| 6 | 16 to 25 years old | City center or metropolitan area | | |
| 7 | 16 to 25 years old | Suburban/Peri-urban | | |
| 8 | 36 to 45 years old | City center or metropolitan area | | |
| 9 | 36 to 45 years old | City center or metropolitan area | | |
| 10 | 16 to 25 years old | Rural | | |
| | financial_situation | education | \ | |
| 0 | I cannot afford enough food for my family | College or university | | |
| 1 | I cannot afford enough food for my family | Secondary/high school | | |
| 2 | I can afford food, but nothing else | College or university | | |
| 3 | I can afford food and regular expenses, and bu... | College or university | | |
| 4 | I can afford food and regular expenses, and bu... | College or university | | |
| 5 | I can comfortably afford food, clothes, and fu... | College or university | | |
| 6 | I can afford food and regular expenses, and bu... | College or university | | |
| 7 | I cannot afford enough food for my family | College or university | | |
| 8 | I can afford food and regular expenses, but no... | College or university | | |
| 9 | I can afford food and regular expenses, but no... | College or university | | |
| 10 | I can afford food, but nothing else | Technical school | | |
| | employment_status | ethnicity | religion | wmn_hh |
| 0 | Unemployed | Mestizo | Catholicism | 3 |
| 1 | Student | Tagalog | Muslim | 13 |
| 2 | Student | Hiligaynon | Christianity | 5 |
| 3 | Unemployed | Thai | Buddhism | 7 |
| 4 | Employed full-time | African | Christianity | 3 |
| 5 | Employed full-time | Bisaya | Christianity | 4 |
| 6 | Employed full-time | Tagalog | Christianity | 10 |
| 7 | Student | Shona | Other | 6 |
| 8 | Employed part-time | Serer | Muslim | 11 |
| 9 | Self-employed | Non-hispanic White | Mormonism | 2 |
| 10 | Employed full-time | Pashtun | Muslim (Shia) | 11 |

```
In [15]: # 14. przedstawic wybor wierszy z ramki danych pod warunkiem odnosnie
#okreslonej wartosci kolumny
print(df[df['wmn_con'].str.contains('Yes')])
```

| | observation_id | submitted_time | gender | \ |
|-------|---|--|-------------------|-----|
| 0 | wmn_4503683847159808 | 2020-07-09 23:19:01.982 UTC | Female | |
| 4 | wmn_4504181395423232 | 2020-07-11 18:43:35.954 UTC | Female | |
| 6 | wmn_4504322055602176 | 2020-07-09 20:43:11.055 UTC | Female | |
| 8 | wmn_4504469091123200 | 2020-07-16 16:03:44.066 UTC | Female | |
| 10 | wmn_4504764873441280 | 2020-07-23 00:29:41.766 UTC | Female | |
| ... | ... | ... | ... | ... |
| 12344 | wmn_6752309616050176 | 2020-07-11 14:37:07.551 UTC | Female | |
| 12346 | wmn_6752968893530112 | 2020-07-14 05:19:46.429 UTC | Female | |
| 12348 | wmn_6753897143336960 | 2020-07-10 11:49:14.64 UTC | Female | |
| 12352 | wmn_6755256899993600 | 2020-07-11 16:09:09.78 UTC | Female | |
| 12353 | wmn_6755376524689408 | 2020-07-17 03:19:00.388 UTC | Female | |
| | age | geography | \ | |
| 0 | 26 to 35 years old | City center or metropolitan area | | |
| 4 | 26 to 35 years old | Suburban/Peri-urban | | |
| 6 | 16 to 25 years old | City center or metropolitan area | | |
| 8 | 36 to 45 years old | City center or metropolitan area | | |
| 10 | 16 to 25 years old | Rural | | |
| ... | ... | ... | ... | |
| 12344 | 26 to 35 years old | City center or metropolitan area | | |
| 12346 | 16 to 25 years old | City center or metropolitan area | | |
| 12348 | 26 to 35 years old | Suburban/Peri-urban | | |
| 12352 | 36 to 45 years old | Rural | | |
| 12353 | 26 to 35 years old | City center or metropolitan area | | |
| | financial_situation | \ | | |
| 0 | I cannot afford enough food for my family | | | |
| 4 | I can afford food and regular expenses, and bu... | | | |
| 6 | I can afford food and regular expenses, and bu... | | | |
| 8 | I can afford food and regular expenses, but no... | | | |
| 10 | I can afford food, but nothing else | | | |
| ... | ... | ... | ... | |
| 12344 | I can comfortably afford food, clothes, and fu... | | | |
| 12346 | I can afford food and regular expenses, and bu... | | | |
| 12348 | I can afford food and regular expenses, but no... | | | |
| 12352 | I can comfortably afford food, clothes, and fu... | | | |
| 12353 | I can afford food and regular expenses, and bu... | | | |
| | education | employment_status | ethnicity | \ |
| 0 | College or university | Unemployed | Mestizo | |
| 4 | College or university | Employed full-time | African | |
| 6 | College or university | Employed full-time | Tagalog | |
| 8 | College or university | Employed part-time | Serer | |
| 10 | Technical school | Employed full-time | Pashtun | |
| ... | ... | ... | ... | |
| 12344 | Post graduate | Employed full-time | Mestizo | |
| 12346 | Secondary/high school | Employed full-time | Prefer not to say | |
| 12348 | Technical school | Employed full-time | Bisaya | |
| 12352 | College or university | Self-employed | Thai | |
| 12353 | Secondary/high school | Employed full-time | Mestizo | |
| | religion | ... wmn_pre_safe_place wmn_post_safe_place | \ | |
| 0 | Catholicism | ... | Nan | |
| 4 | Christianity | ... | Nan | |
| 6 | Christianity | ... | Nan | |
| 8 | Muslim | ... | Nan | |
| 10 | Muslim (Shia) | ... | Nan | |
| ... | ... | ... | ... | |
| 12344 | Catholicism | ... | Nan | |

```

12346 Prefer Not To Answer ...      NaN      NaN
12348 Christianity ...      NaN      NaN
12352 Buddhism ...      NaN      NaN
12353 Catholicism ...      NaN      NaN

wmn_safe_place_no_access wmn_safe_place_no_access_why wmn_pre_help \
0           NaN      NaN      NaN
4           NaN      NaN      NaN
6           NaN      NaN      NaN
8           NaN      NaN      NaN
10          NaN      NaN      NaN
...
12344          ...
12346          ...
12348          ...
12352          ...
12353          ...

wmn_post_help wmn_post_no_help wmn_no_help_why \
0           NaN      NaN      NaN
4           NaN      NaN      NaN
6           NaN      NaN      NaN
8           NaN      NaN      NaN
10          NaN      NaN      NaN
...
12344          ...
12346          ...
12348          ...
12352          ...
12353          ...

country          user_id
0   Ecuador  wmn_5900473574883328
4   United Republic of Tanzania  wmn_6215734184378368
6   Philippines  wmn_5846766880817152
8   Senegal  wmn_6660892420997120
10  Afghanistan  wmn_5962315779538944
...
12344  Colombia  wmn_6066645730066432
12346  Colombia  wmn_5979825287462912
12348  Philippines  wmn_6192783355543552
12352  Thailand  wmn_6730228637892608
12353  Ecuador  wmn_6585614141489152

```

[5426 rows x 46 columns]

```
In [16]: # 15. przedstawiæ wybór wierszy z ramki danych pod warunkiem spełnienia
# kilku warunków jednocześnie
print(df[(df['wmn_con'] == 'Yes') & (df['wmn_pregnancy_change'] == 'No')])
```

| | observation_id | submitted_time | gender | \ |
|-------|---|--|---------------------|-------------|
| 4 | wmn_4504181395423232 | 2020-07-11 18:43:35.954 UTC | Female | |
| 6 | wmn_4504322055602176 | 2020-07-09 20:43:11.055 UTC | Female | |
| 8 | wmn_4504469091123200 | 2020-07-16 16:03:44.066 UTC | Female | |
| 10 | wmn_4504764873441280 | 2020-07-23 00:29:41.766 UTC | Female | |
| 13 | wmn_4505544242233344 | 2020-07-10 01:19:58.4 UTC | Female | |
| ... | ... | ... | ... | ... |
| 12337 | wmn_6750950024019968 | 2020-07-22 00:23:06.043 UTC | Female | |
| 12340 | wmn_6751212218351616 | 2020-07-26 00:49:33.759 UTC | Female | |
| 12344 | wmn_6752309616050176 | 2020-07-11 14:37:07.551 UTC | Female | |
| 12348 | wmn_6753897143336960 | 2020-07-10 11:49:14.64 UTC | Female | |
| 12352 | wmn_67552568999993600 | 2020-07-11 16:09:09.78 UTC | Female | |
| | age | | geography | \ |
| 4 | 26 to 35 years old | | Suburban/Peri-urban | |
| 6 | 16 to 25 years old | City center or metropolitan area | | |
| 8 | 36 to 45 years old | City center or metropolitan area | | |
| 10 | 16 to 25 years old | | Rural | |
| 13 | 16 to 25 years old | | Rural | |
| ... | ... | ... | ... | ... |
| 12337 | 16 to 25 years old | | Suburban/Peri-urban | |
| 12340 | 16 to 25 years old | | Suburban/Peri-urban | |
| 12344 | 26 to 35 years old | City center or metropolitan area | | |
| 12348 | 26 to 35 years old | | Suburban/Peri-urban | |
| 12352 | 36 to 45 years old | | Rural | |
| | financial_situation | | | \ |
| 4 | I can afford food and regular expenses, and bu... | | | |
| 6 | I can afford food and regular expenses, and bu... | | | |
| 8 | I can afford food and regular expenses, but no... | | | |
| 10 | | I can afford food, but nothing else | | |
| 13 | | I cannot afford enough food for my family | | |
| ... | ... | ... | ... | ... |
| 12337 | | I cannot afford enough food for my family | | |
| 12340 | I can afford food and regular expenses, but no... | | | |
| 12344 | I can comfortably afford food, clothes, and fu... | | | |
| 12348 | I can afford food and regular expenses, but no... | | | |
| 12352 | I can comfortably afford food, clothes, and fu... | | | |
| | education | employment_status | | ethnicity \ |
| 4 | College or university | Employed full-time | | African |
| 6 | College or university | Employed full-time | | Tagalog |
| 8 | College or university | Employed part-time | | Serer |
| 10 | Technical school | Employed full-time | | Pashtun |
| 13 | Secondary/high school | Student | | Ilocano |
| ... | ... | ... | ... | ... |
| 12337 | College or university | Self-employed | None of the above | |
| 12340 | College or university | Employed full-time | | White |
| 12344 | Post graduate | Employed full-time | | Mestizo |
| 12348 | Technical school | Employed full-time | | Bisaya |
| 12352 | College or university | Self-employed | | Thai |
| | religion | ... wmn_pre_safe_place wmn_post_safe_place | \ | |
| 4 | Christianity | ... | Nan | NaN |
| 6 | Christianity | ... | Nan | NaN |
| 8 | Muslim | ... | Nan | NaN |
| 10 | Muslim (Shia) | ... | Nan | NaN |
| 13 | Prefer Not To Answer | ... | Nan | NaN |
| ... | ... | ... | ... | ... |
| 12337 | Christianity | ... | Nan | NaN |

| | | | | |
|-------|---|--------------------------|---------|-----|
| 12340 | Agnosticism | ... | NaN | NaN |
| 12344 | Catholicism | ... | NaN | NaN |
| 12348 | Christianity | ... | NaN | NaN |
| 12352 | Buddhism | ... | NaN | NaN |
| | | | | \ |
| 4 | | NaN | NaN | |
| 6 | | NaN | NaN | |
| 8 | | NaN | NaN | |
| 10 | | NaN | NaN | |
| 13 | | NaN | NaN | |
| ... | | ... | ... | |
| 12337 | | NaN | NaN | |
| 12340 | | NaN | NaN | |
| 12344 | | NaN | NaN | |
| 12348 | | NaN | NaN | |
| 12352 | | NaN | NaN | |
| | | | | \ |
| 4 | wmn_pre_help | NaN | NaN | NaN |
| 6 | | NaN | NaN | NaN |
| 8 | | NaN | NaN | NaN |
| 10 | | NaN | NaN | NaN |
| 13 | Decline to respond | No | Yes | |
| ... | | ... | ... | |
| 12337 | | No | No | Yes |
| 12340 | | NaN | NaN | NaN |
| 12344 | | No | No | No |
| 12348 | | NaN | NaN | NaN |
| 12352 | | NaN | NaN | NaN |
| | | | | \ |
| 4 | wmn_no_help_why | NaN | | |
| 6 | | NaN | | |
| 8 | | NaN | | |
| 10 | | NaN | | |
| 13 | Unable to travel due to COVID-19 restrictions | | | |
| ... | | | ... | |
| 12337 | | Did not know where to go | | |
| 12340 | | | NaN | |
| 12344 | | | NaN | |
| 12348 | | | NaN | |
| 12352 | | | NaN | |
| | | | | \ |
| 4 | country | | user_id | |
| 6 | United Republic of Tanzania | wmn_6215734184378368 | | |
| 8 | Philippines | wmn_5846766880817152 | | |
| 10 | Senegal | wmn_6660892420997120 | | |
| 13 | Afghanistan | wmn_5962315779538944 | | |
| ... | | ... | ... | |
| 12337 | Philippines | wmn_6297768996110336 | | |
| 12340 | Nigeria | wmn_4507016238465024 | | |
| 12344 | Chile | wmn_5663526413926400 | | |
| 12348 | Colombia | wmn_6066645730066432 | | |
| 12352 | Philippines | wmn_6192783355543552 | | |
| | Thailand | wmn_6730228637892608 | | |

[3421 rows x 46 columns]

```
In [17]: # 16. wybrać wiersze które zawierają w kolumnie kategoryzowanej określone Lowo  
print(df[df['wmn_con'].str.contains('Yes')])
```

| | observation_id | submitted_time | gender | \ |
|-------|---|--|-------------------|-----|
| 0 | wmn_4503683847159808 | 2020-07-09 23:19:01.982 UTC | Female | |
| 4 | wmn_4504181395423232 | 2020-07-11 18:43:35.954 UTC | Female | |
| 6 | wmn_4504322055602176 | 2020-07-09 20:43:11.055 UTC | Female | |
| 8 | wmn_4504469091123200 | 2020-07-16 16:03:44.066 UTC | Female | |
| 10 | wmn_4504764873441280 | 2020-07-23 00:29:41.766 UTC | Female | |
| ... | ... | ... | ... | ... |
| 12344 | wmn_6752309616050176 | 2020-07-11 14:37:07.551 UTC | Female | |
| 12346 | wmn_6752968893530112 | 2020-07-14 05:19:46.429 UTC | Female | |
| 12348 | wmn_6753897143336960 | 2020-07-10 11:49:14.64 UTC | Female | |
| 12352 | wmn_6755256899993600 | 2020-07-11 16:09:09.78 UTC | Female | |
| 12353 | wmn_6755376524689408 | 2020-07-17 03:19:00.388 UTC | Female | |
| | age | geography | \ | |
| 0 | 26 to 35 years old | City center or metropolitan area | | |
| 4 | 26 to 35 years old | Suburban/Peri-urban | | |
| 6 | 16 to 25 years old | City center or metropolitan area | | |
| 8 | 36 to 45 years old | City center or metropolitan area | | |
| 10 | 16 to 25 years old | Rural | | |
| ... | ... | ... | ... | |
| 12344 | 26 to 35 years old | City center or metropolitan area | | |
| 12346 | 16 to 25 years old | City center or metropolitan area | | |
| 12348 | 26 to 35 years old | Suburban/Peri-urban | | |
| 12352 | 36 to 45 years old | Rural | | |
| 12353 | 26 to 35 years old | City center or metropolitan area | | |
| | financial_situation | \ | | |
| 0 | I cannot afford enough food for my family | | | |
| 4 | I can afford food and regular expenses, and bu... | | | |
| 6 | I can afford food and regular expenses, and bu... | | | |
| 8 | I can afford food and regular expenses, but no... | | | |
| 10 | I can afford food, but nothing else | | | |
| ... | ... | ... | ... | |
| 12344 | I can comfortably afford food, clothes, and fu... | | | |
| 12346 | I can afford food and regular expenses, and bu... | | | |
| 12348 | I can afford food and regular expenses, but no... | | | |
| 12352 | I can comfortably afford food, clothes, and fu... | | | |
| 12353 | I can afford food and regular expenses, and bu... | | | |
| | education | employment_status | ethnicity | \ |
| 0 | College or university | Unemployed | Mestizo | |
| 4 | College or university | Employed full-time | African | |
| 6 | College or university | Employed full-time | Tagalog | |
| 8 | College or university | Employed part-time | Serer | |
| 10 | Technical school | Employed full-time | Pashtun | |
| ... | ... | ... | ... | |
| 12344 | Post graduate | Employed full-time | Mestizo | |
| 12346 | Secondary/high school | Employed full-time | Prefer not to say | |
| 12348 | Technical school | Employed full-time | Bisaya | |
| 12352 | College or university | Self-employed | Thai | |
| 12353 | Secondary/high school | Employed full-time | Mestizo | |
| | religion | ... wmn_pre_safe_place wmn_post_safe_place | \ | |
| 0 | Catholicism | ... | Nan | |
| 4 | Christianity | ... | Nan | |
| 6 | Christianity | ... | Nan | |
| 8 | Muslim | ... | Nan | |
| 10 | Muslim (Shia) | ... | Nan | |
| ... | ... | ... | ... | |
| 12344 | Catholicism | ... | Nan | |

```

12346 Prefer Not To Answer ...
12348 Christianity ...
12352 Buddhism ...
12353 Catholicism ...

wmn_safe_place_no_access wmn_safe_place_no_access_why wmn_pre_help \
0 NaN NaN NaN
4 NaN NaN NaN
6 NaN NaN NaN
8 NaN NaN NaN
10 NaN NaN NaN
...
12344 ...
12346 ...
12348 ...
12352 ...
12353 ...

wmn_post_help wmn_post_no_help wmn_no_help_why \
0 NaN NaN NaN
4 NaN NaN NaN
6 NaN NaN NaN
8 NaN NaN NaN
10 NaN NaN NaN
...
12344 ...
12346 ...
12348 ...
12352 ...
12353 ...

country user_id
0 Ecuador wmn_5900473574883328
4 United Republic of Tanzania wmn_6215734184378368
6 Philippines wmn_5846766880817152
8 Senegal wmn_6660892420997120
10 Afghanistan wmn_5962315779538944
...
12344 ...
12346 ...
12348 ...
12352 ...
12353 ...

```

[5426 rows x 46 columns]

```
In [26]: # 17. utwórz kolumnę na podstawie istniejących
df['NewColumn'] = df['age'] + '+ 5'
```

```
In [27]: # 18. Usuwanie kolumny
df.drop(columns=['NewColumn'], inplace=True)
```

```
In [28]: # 19. Zmiana nazwy kolumny
df.rename(columns={'age': 'Age(lbl)'}, inplace=True)
```

```
In [29]: # 20. Zapis ramki danych jako CSV
df.to_csv('data2.csv', index=False)
```

```
In [36]: # 21. Statystyki kolumny
print("Średnia:", ramka1['Age'].mean())
print("Maksimum:", ramka1['Age'].max())
print("Minimum:", ramka1['Age'].min())
```

Średnia: 33.0

Maksimum: 44

Minimum: 22

```
In [37]: # 22. Liczba wierszy
print("Liczba wierszy:", len(df))
```

Liczba wierszy: 12354

```
In [39]: # 23. Unikalne wartości w kolumnie
print(df['gender'].unique())
```

['Female' 'Prefer not to answer' 'Not Available']

```
In [40]: # 24. Liczba rekordów dla wartości
print(df['gender'].value_counts())
```

| gender | count |
|----------------------|-------|
| Female | 12331 |
| Prefer not to answer | 15 |
| Not Available | 8 |

Name: count, dtype: int64

```
In [41]: # 25. Sortowanie wierszy
sorted_df = df.sort_values(by='Age(lvl)', ascending=True)
```

```
In [42]: # 26. Największe i najmniejsze wartości
print(ramka1.nlargest(10, 'Age'))
print(ramka1.nsmallest(10, 'Age'))
```

| | Name | Surname | Age |
|---|---------|---------|-----|
| 2 | Charles | Zajety | 44 |
| 1 | Bob | Kowal | 33 |
| 0 | Anna | Kubus | 22 |

| | Name | Surname | Age |
|---|---------|---------|-----|
| 0 | Anna | Kubus | 22 |
| 1 | Bob | Kowal | 33 |
| 2 | Charles | Zajety | 44 |

```
In [46]: # 27. Największe wartości z warunkiem
print(ramka1[ramka1['Name'] == 'Anna'].nlargest(10, 'Age'))
```

| | Name | Surname | Age |
|---|------|---------|-----|
| 0 | Anna | Kubus | 22 |

```
In [49]: # 28. Grupowanie wierszy według wartości kolumny kategoryzowanej, potem uśrednie
grouped = df.groupby('gender').mean(numeric_only=True)
print(grouped)
```

```
wmn_pre_injectable_missed  wmn_pre_iud_missed \
gender
Female                      214.765957      1.033763e+07
Not Available                NaN          NaN
Prefer not to answer        NaN          NaN

wmn_post_injectable_missed  wmn_post_iud_missed \
gender
Female                      232.845455      1.292203e+07
Not Available                NaN          NaN
Prefer not to answer        NaN          NaN

wmn_hh_cleaned
gender
Female                      4.368885
Not Available                4.375000
Prefer not to answer        3.600000
```

In [52]: # 29. Grupowanie wierszy według wartości kolumny kategoryzowanej, potem
- uśrednienie wartości dla pewnych kolumn, liczba wartości i mediana dla pozostałych

```
grouped_agg = ramka1.groupby('Name').agg({'Age': ['mean', 'count'], 'Name': ['max']})
print(grouped_agg)
```

| | Age | | Name |
|---------|------|-------|---------|
| | mean | count | max |
| Name | | | |
| Anna | 22.0 | 1 | Anna |
| Bob | 33.0 | 1 | Bob |
| Charles | 44.0 | 1 | Charles |

In [53]: # 30. Wyświetl nazwy kolumn indeksu złożonego

```
print(grouped_agg.columns)
```

```
MultiIndex([( 'Age', 'mean'),
            ( 'Age', 'count'),
            ('Name', 'max')],  

           )
```

In [54]: # 31. Sortowanie kolumn indeksu złożonego

```
grouped_agg_sorted = grouped_agg.sort_index(axis=1)
print(grouped_agg_sorted)
```

| | Age | | Name |
|---------|-------|------|---------|
| | count | mean | max |
| Name | | | |
| Anna | 1 | 22.0 | Anna |
| Bob | 1 | 33.0 | Bob |
| Charles | 1 | 44.0 | Charles |

In [57]: # 32. Tworzenie tabeli przestawnej (pivot table)

```
pivot = ramka1.pivot_table(values='Age', index='Surname', aggfunc='mean')
print(pivot)
```

| Surname | Age |
|---------|------|
| Kowal | 33.0 |
| Kubus | 22.0 |
| Zajety | 44.0 |

In [58]: # 33. Wyświetlenie indeksów i kolumn tabeli przestawnej

```
print("Indeksy:", pivot.index)
```

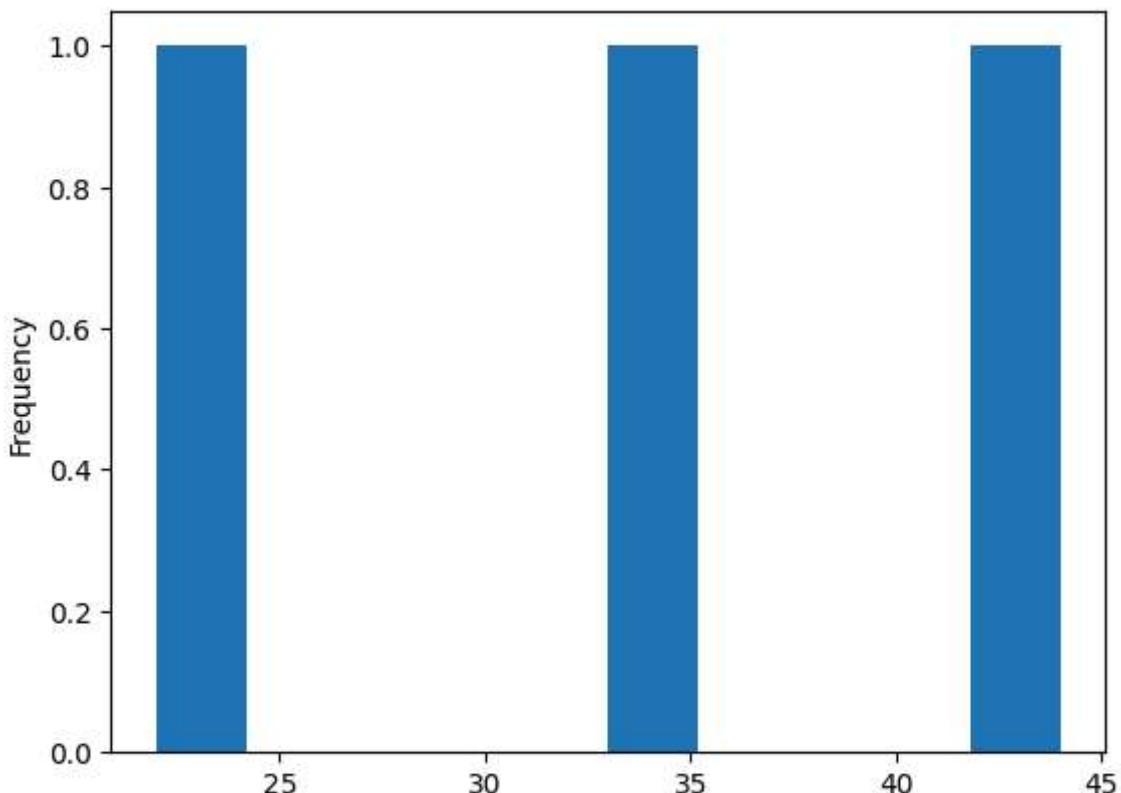
```
print("Kolumny:", pivot.columns)
```

Indeksy: Index(['Kowal', 'Kubus', 'Zajety'], dtype='object', name='Surname')
 Kolumny: Index(['Age'], dtype='object')

In [62]: # 34. Utwórz indeks złożony tabeli przestawnej i wyświetl go
 pivot_multi = ramka1.pivot_table(values='Age', index=['Surname', 'Name'], aggfunc=
 print(pivot_multi)

| Age | | |
|---------|---------|------|
| Surname | Name | |
| Kowal | Bob | 33.0 |
| Kubus | Anna | 22.0 |
| Zajety | Charles | 44.0 |

In [63]: # 35. Histogram
 ramka1['Age'].plot(kind='hist')
 plt.show()



In [65]: # 36. Łączenie ramek danych
 df3 = pd.DataFrame({'Name': ['Anna', 'Bob'], 'Salary': [5000, 6000]})
 merged_df = pd.merge(ramka1, df3, on='Name')
 print(merged_df)

| | Name | Surname | Age | Salary |
|---|------|---------|-----|--------|
| 0 | Anna | Kubus | 22 | 5000 |
| 1 | Bob | Kowal | 33 | 6000 |

In [68]: # 37. Dodawanie nowych kolumn
 ramka1['Double Age'] = ramka1['Age'] * 2
 ramka1['Age Squared'] = ramka1['Age'].apply(lambda x: x**2)

In [71]: # 38. Praca z dużymi plikami
 for chunk in pd.read_csv("data2.csv", chunksize=1000):
 print(chunk.head())

| | observation_id | submitted_time | gender | \ |
|---|----------------------|-----------------------------|--------|---|
| 0 | wmn_4503683847159808 | 2020-07-09 23:19:01.982 UTC | Female | |
| 1 | wmn_4503772699295744 | 2020-07-09 21:22:15.864 UTC | Female | |
| 2 | wmn_4504010469146624 | 2020-07-10 05:09:07.359 UTC | Female | |
| 3 | wmn_4504035500752896 | 2020-07-11 16:59:49.85 UTC | Female | |
| 4 | wmn_4504181395423232 | 2020-07-11 18:43:35.954 UTC | Female | |

| | Age(lvl) | geography | \ |
|---|--------------------|----------------------------------|---|
| 0 | 26 to 35 years old | City center or metropolitan area | |
| 1 | 16 to 25 years old | Rural | |
| 2 | 16 to 25 years old | Rural | |
| 3 | 16 to 25 years old | Suburban/Peri-urban | |
| 4 | 26 to 35 years old | Suburban/Peri-urban | |

| | financial_situation | education | \ |
|---|---|-----------------------|---|
| 0 | I cannot afford enough food for my family | College or university | |
| 1 | I cannot afford enough food for my family | Secondary/high school | |
| 2 | I can afford food, but nothing else | College or university | |
| 3 | I can afford food and regular expenses, and bu... | College or university | |
| 4 | I can afford food and regular expenses, and bu... | College or university | |

| | employment_status | ethnicity | religion | ... | wmn_post_safe_place | \ |
|---|--------------------|------------|--------------|-----|---------------------|-----|
| 0 | Unemployed | Mestizo | Catholicism | ... | | NaN |
| 1 | Student | Tagalog | Muslim | ... | | NaN |
| 2 | Student | Hiligaynon | Christianity | ... | | NaN |
| 3 | Unemployed | Thai | Buddhism | ... | | NaN |
| 4 | Employed full-time | African | Christianity | ... | | NaN |

| | wmn_safe_place_no_access | wmn_safe_place_no_access_why | wmn_pre_help | \ |
|---|--------------------------|------------------------------|--------------|-----|
| 0 | NaN | | NaN | NaN |
| 1 | NaN | | NaN | NaN |
| 2 | NaN | | NaN | NaN |
| 3 | NaN | | NaN | NaN |
| 4 | NaN | | NaN | NaN |

| | wmn_post_help | wmn_post_no_help | wmn_no_help_why | country | \ |
|---|---------------|------------------|-----------------------------|-------------|---|
| 0 | NaN | NaN | NaN | Ecuador | |
| 1 | NaN | NaN | NaN | Philippines | |
| 2 | NaN | NaN | NaN | Philippines | |
| 3 | NaN | NaN | NaN | Thailand | |
| 4 | NaN | NaN | United Republic of Tanzania | Tanzania | |

| | user_id | wmn_hh_cleaned |
|---|----------------------|----------------|
| 0 | wmn_5900473574883328 | 3.0 |
| 1 | wmn_5702261783658496 | 13.0 |
| 2 | wmn_5652767014387712 | 5.0 |
| 3 | wmn_6411372690669568 | 7.0 |
| 4 | wmn_6215734184378368 | 3.0 |

[5 rows x 47 columns]

| | observation_id | submitted_time | gender | \ |
|------|----------------------|-----------------------------|--------|---|
| 1000 | wmn_469037399067136 | 2020-07-09 23:12:18.174 UTC | Female | |
| 1001 | wmn_4690387753238528 | 2020-07-10 15:19:05.116 UTC | Female | |
| 1002 | wmn_4690540798148608 | 2020-07-10 19:11:03.185 UTC | Female | |
| 1003 | wmn_4690676358053888 | 2020-07-10 03:53:27.735 UTC | Female | |
| 1004 | wmn_4690788396302336 | 2020-07-10 19:56:12.323 UTC | Female | |

| | Age(lvl) | geography | \ |
|------|--------------------|----------------------------------|---|
| 1000 | 26 to 35 years old | City center or metropolitan area | |
| 1001 | 16 to 25 years old | Suburban/Peri-urban | |

| | | | | |
|--|---|------------------------------------|---------|------------------|
| 1002 | 26 to 35 years old | Suburban/Peri-urban | | |
| 1003 | 36 to 45 years old | Suburban/Peri-urban | | |
| 1004 | Over 45 years old | Suburban/Peri-urban | | |
| financial_situation \ | | | | |
| 1000 | I can afford food and regular expenses, but no... | | | |
| 1001 | I can afford food and regular expenses, and bu... | | | |
| 1002 | I can comfortably afford food, clothes, and fu... | | | |
| 1003 | I can afford food and regular expenses, but no... | | | |
| 1004 | I can afford food, but nothing else | | | |
| education employment_status ethnicity religion \ | | | | |
| 1000 | College or university | Employed full-time | Mestizo | Catholicism |
| 1001 | College or university | Unemployed | Other | Christianity |
| 1002 | Secondary/high school | Self-employed | White | Catholicism |
| 1003 | College or university | Employed full-time | Serb | Eastern Orthodox |
| 1004 | College or university | Employed part-time | Mestizo | Catholicism |
| ... wmn_post_safe_place wmn_safe_place_no_access \ | | | | |
| 1000 | ... | NaN | NaN | |
| 1001 | ... | NaN | NaN | |
| 1002 | ... | NaN | NaN | |
| 1003 | ... | Never | No | |
| 1004 | ... | NaN | NaN | |
| wmn_safe_place_no_access_why wmn_pre_help wmn_post_help wmn_post_no_help \ | | | | |
| 1000 | | NaN | No | No |
| 1001 | | NaN | NaN | NaN |
| 1002 | | NaN | NaN | NaN |
| 1003 | | NaN | No | No |
| 1004 | | NaN | NaN | NaN |
| wmn_no_help_why country \ | | | | |
| 1000 | Nan | Venezuela (Bolivarian Republic of) | | |
| 1001 | Nan | Kenya | | |
| 1002 | Nan | Chile | | |
| 1003 | Nan | Serbia | | |
| 1004 | NaN | Venezuela (Bolivarian Republic of) | | |
| user_id wmn_hh_cleaned | | | | |
| 1000 | wmn_6333456825188352 | 3.0 | | |
| 1001 | wmn_5112841375318016 | 3.0 | | |
| 1002 | wmn_5262634199285760 | 2.0 | | |
| 1003 | wmn_6512390551633920 | 4.0 | | |
| 1004 | wmn_6415134161633280 | 5.0 | | |

[5 rows x 47 columns]

| | observation_id | submitted_time | gender | \ |
|------|----------------------|-----------------------------|--------|---|
| 2000 | wmn_4871483173371904 | 2020-07-11 20:24:11.726 UTC | Female | |
| 2001 | wmn_4871486394597376 | 2020-07-10 05:07:18.708 UTC | Female | |
| 2002 | wmn_4871576723128320 | 2020-07-16 18:49:39.209 UTC | Female | |
| 2003 | wmn_4871652690362368 | 2020-07-13 23:18:41.198 UTC | Female | |
| 2004 | wmn_4871853345865728 | 2020-07-14 05:14:00.923 UTC | Female | |

| | Age(lvl) | geography | \ |
|------|--------------------|----------------------------------|---|
| 2000 | 16 to 25 years old | City center or metropolitan area | |
| 2001 | 16 to 25 years old | City center or metropolitan area | |
| 2002 | 26 to 35 years old | Suburban/Peri-urban | |
| 2003 | 16 to 25 years old | City center or metropolitan area | |
| 2004 | 16 to 25 years old | City center or metropolitan area | |

| | financial_situation \ | | | | |
|-----------------------|---|----------------------------------|----------------------|------------------|-----|
| 2000 | I cannot afford enough food for my family | | | | |
| 2001 | I can afford food, but nothing else | | | | |
| 2002 | I can afford food, but nothing else | | | | |
| 2003 | I can afford food and regular expenses, but no... | | | | |
| 2004 | I can afford food, but nothing else | | | | |
| | education | employment_status | ethnicity | religion | ... |
| 2000 | Secondary/high school | Student | White | Catholicism | ... |
| 2001 | College or university | Unemployed | Bisaya | Other | ... |
| 2002 | College or university | Self-employed | Sunda | Muslim | ... |
| 2003 | Secondary/high school | Student | Mestizo | Catholicism | ... |
| 2004 | Primary school | Student | Java | Muslim | ... |
| | wmn_post_safe_place | wmn_safe_place_no_access | \ | | |
| 2000 | NaN | NaN | \ | | |
| 2001 | NaN | NaN | \ | | |
| 2002 | NaN | NaN | \ | | |
| 2003 | NaN | NaN | \ | | |
| 2004 | NaN | NaN | \ | | |
| | wmn_safe_place_no_access_why | wmn_pre_help | wmn_post_help | wmn_post_no_help | \ |
| 2000 | NaN | NaN | NaN | NaN | \ |
| 2001 | NaN | NaN | NaN | NaN | \ |
| 2002 | NaN | NaN | NaN | NaN | \ |
| 2003 | NaN | NaN | NaN | NaN | \ |
| 2004 | NaN | No | No | Don't know | \ |
| | wmn_no_help_why | country | user_id | wmn_hh_cleaned | |
| 2000 | Nan | Chile | wmn_6202841600884736 | 3.0 | |
| 2001 | Nan | Philippines | wmn_5246222487257088 | 7.0 | |
| 2002 | NaN | Indonesia | wmn_5562370554593280 | 9.0 | |
| 2003 | Nan | Mexico | wmn_5083456740786176 | 5.0 | |
| 2004 | NaN | Indonesia | wmn_5903632416899072 | 5.0 | |
| [5 rows x 47 columns] | | | | | |
| | observation_id | submitted_time | gender | \ | |
| 3000 | wmn_5047277862518784 | 2020-07-10 04:09:07.689 UTC | Female | \ | |
| 3001 | wmn_5047531768905728 | 2020-07-24 12:43:01.134 UTC | Female | \ | |
| 3002 | wmn_5047583006523392 | 2020-07-11 15:22:52.464 UTC | Female | \ | |
| 3003 | wmn_5047667328811008 | 2020-07-10 02:16:16.685 UTC | Female | \ | |
| 3004 | wmn_5047684609343488 | 2020-07-11 05:02:44.139 UTC | Female | \ | |
| | Age(lvl) | geography | \ | | |
| 3000 | 26 to 35 years old | Suburban/Peri-urban | \ | | |
| 3001 | 16 to 25 years old | Rural | \ | | |
| 3002 | 16 to 25 years old | City center or metropolitan area | \ | | |
| 3003 | 26 to 35 years old | City center or metropolitan area | \ | | |
| 3004 | 16 to 25 years old | City center or metropolitan area | \ | | |
| | financial_situation \ | | | | |
| 3000 | I can afford food and regular expenses, and bu... | | | | |
| 3001 | I can afford food and regular expenses, but no... | | | | |
| 3002 | I can comfortably afford food, clothes, and fu... | | | | |
| 3003 | I can afford food and regular expenses, and bu... | | | | |
| 3004 | I can afford food and regular expenses, and bu... | | | | |
| | education | employment_status | ethnicity | \ | |
| 3000 | Post graduate | Employed full-time | Hausa | \ | |

| | | | |
|------|------------------------------|--|---------|
| 3001 | College or university | Student and work part-time | Other |
| 3002 | Primary school | Student | Polish |
| 3003 | College or university | Employed part-time | Black |
| 3004 | College or university | Employed full-time | Tagalog |
| | religion | ... wmn_post_safe_place wmn_safe_place_no_access \ | |
| 3000 | Christianity | Once a month | No |
| 3001 | Muslim | NaN | NaN |
| 3002 | Agnosticism | NaN | NaN |
| 3003 | Catholicism | NaN | NaN |
| 3004 | Other | NaN | NaN |
| | wmn_safe_place_no_access_why | wmn_pre_help wmn_post_help wmn_post_no_help \ | |
| 3000 | | NaN No No No | No |
| 3001 | | NaN NaN NaN NaN | NaN |
| 3002 | | NaN NaN NaN NaN | NaN |
| 3003 | | NaN NaN NaN NaN | NaN |
| 3004 | | NaN NaN NaN NaN | NaN |
| | wmn_no_help_why | country user_id wmn_hh_cleaned | |
| 3000 | Nan | Nigeria wmn_5576736666550272 4.0 | |
| 3001 | Nan | India wmn_6473562413334528 8.0 | |
| 3002 | Nan | Poland wmn_5809934505869312 5.0 | |
| 3003 | Nan | Brazil wmn_5834790434504704 2.0 | |
| 3004 | Nan | Philippines wmn_5281358157185024 5.0 | |

[5 rows x 47 columns]

| | observation_id | submitted_time | gender | \ |
|------|----------------------|-----------------------------|--------|---|
| 4000 | wmn_5229767264829440 | 2020-07-09 23:49:45.111 UTC | Female | |
| 4001 | wmn_5229923964026880 | 2020-07-10 15:31:34.374 UTC | Female | |
| 4002 | wmn_5230054457212928 | 2020-07-20 04:54:28.742 UTC | Female | |
| 4003 | wmn_5230313262546944 | 2020-07-10 00:53:58.203 UTC | Female | |
| 4004 | wmn_5230346045227008 | 2020-07-19 22:54:48.196 UTC | Female | |

| | Age(lvl) | geography | \ |
|------|--------------------|---------------------|---|
| 4000 | 16 to 25 years old | Rural | |
| 4001 | 26 to 35 years old | Rural | |
| 4002 | 16 to 25 years old | Rural | |
| 4003 | 26 to 35 years old | Suburban/Peri-urban | |
| 4004 | 16 to 25 years old | Rural | |

| | financial_situation | \ |
|------|---|---|
| 4000 | I can afford food and regular expenses, but no... | |
| 4001 | I can afford food and regular expenses, but no... | |
| 4002 | I can afford food, but nothing else | |
| 4003 | I can afford food and regular expenses, but no... | |
| 4004 | I can afford food and regular expenses, but no... | |

| | education | employment_status | ethnicity | \ |
|------|-----------------------|--------------------|--------------------|---|
| 4000 | Secondary/high school | Student | Tagalog | |
| 4001 | College or university | Unemployed | Arab | |
| 4002 | Secondary/high school | Employed part-time | Arab | |
| 4003 | College or university | Self-employed | None of the above | |
| 4004 | Primary school | Unemployed | Non-hispanic White | |

| | | | |
|------|----------------|--|-----|
| | religion | ... wmn_post_safe_place wmn_safe_place_no_access \ | |
| 4000 | Christianity | NaN NaN | NaN |
| 4001 | Muslim (Sunni) | NaN NaN | NaN |
| 4002 | Muslim (Sunni) | NaN NaN | NaN |
| 4003 | Muslim | NaN NaN | NaN |

| | | | | |
|---|---|----------------------------------|----------------------|------------|
| 4004 | Other | ... | Never | No |
| <code>wmn_safe_place_no_access_why wmn_pre_help wmn_post_help wmn_post_no_help \</code> | | | | |
| 4000 | | NaN | NaN | NaN |
| 4001 | | NaN | NaN | NaN |
| 4002 | | NaN | NaN | NaN |
| 4003 | | NaN | NaN | NaN |
| 4004 | | NaN | No | No |
| <code>wmn_no_help_why country user_id wmn_hh_cleaned</code> | | | | |
| 4000 | NaN | Philippines | wmn_6349964117540864 | 5.0 |
| 4001 | NaN | Jordan | wmn_5733538707013632 | 3.0 |
| 4002 | NaN | Iraq | wmn_5836698824212480 | 2.0 |
| 4003 | NaN | Nigeria | wmn_5261641671770112 | 8.0 |
| 4004 | NaN | United States | wmn_6222871849598976 | 1.0 |
| [5 rows x 47 columns] | | | | |
| 5000 | observation_id | | submitted_time | gender |
| 5000 | wmn_5411990077177856 | 2020-07-21 15:08:20.106 UTC | | Female |
| 5001 | wmn_5412051850887168 | 2020-07-15 11:01:08.017 UTC | | Female |
| 5002 | wmn_5412370081120256 | 2020-07-09 20:59:31.107 UTC | | Female |
| 5003 | wmn_5412542248910848 | 2020-07-16 08:04:17.24 UTC | | Female |
| 5004 | wmn_5412644891918336 | 2020-07-11 18:08:10.138 UTC | | Female |
| <code>Age(lvl) geography \</code> | | | | |
| 5000 | 36 to 45 years old | | Rural | |
| 5001 | 16 to 25 years old | City center or metropolitan area | | |
| 5002 | 16 to 25 years old | | Rural | |
| 5003 | 16 to 25 years old | City center or metropolitan area | | |
| 5004 | 36 to 45 years old | City center or metropolitan area | | |
| <code>financial_situation \</code> | | | | |
| 5000 | I can afford food and regular expenses, and bu... | | | |
| 5001 | I can afford food and regular expenses, but no... | | | |
| 5002 | I cannot afford enough food for my family | | | |
| 5003 | I can afford food, but nothing else | | | |
| 5004 | I can afford food and regular expenses, and bu... | | | |
| <code>education employment_status ethnicity \</code> | | | | |
| 5000 | Primary school | Employed full-time | Non-hispanic White | |
| 5001 | College or university | Student | Amhara | |
| 5002 | Secondary/high school | Student | Bambara | |
| 5003 | Primary school | Student | Malinke | |
| 5004 | College or university | Employed part-time | Arab | |
| <code>religion ... wmn_post_safe_place wmn_safe_place_no_access \</code> | | | | |
| 5000 | Other | ... | Never | No |
| 5001 | Ethiopian Orthodox | ... | NaN | NaN |
| 5002 | Muslim | ... | NaN | NaN |
| 5003 | Muslim | ... | Once a week | No |
| 5004 | Prefer Not To Answer | ... | NaN | NaN |
| <code>wmn_safe_place_no_access_why wmn_pre_help wmn_post_help wmn_post_no_help \</code> | | | | |
| 5000 | | NaN | No | No |
| 5001 | | NaN | NaN | NaN |
| 5002 | | NaN | NaN | NaN |
| 5003 | | NaN | No | Don't know |
| 5004 | | NaN | NaN | NaN |
| <code>wmn_no_help_why country user_id wmn_hh_cleaned</code> | | | | |

| | | | | |
|-----------------------|---|------------------------------------|----------------------------|--------------------|
| 5000 | NaN | United States | wmn_6149408982302720 | 5.0 |
| 5001 | Nan | Ethiopia | wmn_5111095805345792 | 6.0 |
| 5002 | Nan | Mali | wmn_4994740313653248 | 10.0 |
| 5003 | Nan | Mali | wmn_5450078617075712 | NaN |
| 5004 | NaN | Algeria | wmn_5151437862731776 | 3.0 |
| [5 rows x 47 columns] | | | | |
| 6000 | observation_id | | submitted_time | gender \ |
| 6000 | wmn_5599353462063104 | 2020-07-10 04:46:51.022 UTC | Female | |
| 6001 | wmn_5599472915841024 | 2020-07-17 14:25:38.871 UTC | Female | |
| 6002 | wmn_5599501135118336 | 2020-07-11 04:42:58.761 UTC | Female | |
| 6003 | wmn_5599504017653760 | 2020-07-10 02:00:39.524 UTC | Female | |
| 6004 | wmn_5599576833916928 | 2020-07-10 12:43:17.487 UTC | Female | |
| 6000 | Age(lvl) | | geography \ | |
| 6000 | 16 to 25 years old | City center or metropolitan area | | |
| 6001 | 26 to 35 years old | Rural | | |
| 6002 | 16 to 25 years old | City center or metropolitan area | | |
| 6003 | 26 to 35 years old | Suburban/Peri-urban | | |
| 6004 | 26 to 35 years old | City center or metropolitan area | | |
| 6000 | | financial_situation \ | | |
| 6000 | I can comfortably afford food, clothes, and fu... | | | |
| 6001 | I can afford food and regular expenses, but no... | | | |
| 6002 | I can afford food and regular expenses, but no... | | | |
| 6003 | I cannot afford enough food for my family | | | |
| 6004 | I can afford food and regular expenses, and bu... | | | |
| 6000 | education | employment_status | ethnicity \ | |
| 6000 | College or university | Self-employed | White | |
| 6001 | College or university | Self-employed | White | |
| 6002 | Technical school | Employed part-time | Prefer not to say | |
| 6003 | Secondary/high school | Retired | Other | |
| 6004 | College or university | Unemployed | Arab | |
| 6000 | religion | ... wmn_post_safe_place | wmn_safe_place_no_access \ | |
| 6000 | Catholicism | ... | NaN | NaN |
| 6001 | Prefer Not To Answer | ... | NaN | NaN |
| 6002 | Catholicism | ... | Once a week | No |
| 6003 | Christianity | ... | NaN | NaN |
| 6004 | Muslim (Sunni) | ... | Never | No |
| 6000 | wmn_safe_place_no_access_why | wmn_pre_help | wmn_post_help | wmn_post_no_help \ |
| 6000 | | NaN | No | No |
| 6001 | | NaN | NaN | NaN |
| 6002 | | NaN | No | No |
| 6003 | | NaN | NaN | NaN |
| 6004 | | NaN | No | No |
| 6000 | wmn_no_help_why | | country \ | |
| 6000 | NaN | | Brazil | |
| 6001 | NaN | Venezuela (Bolivarian Republic of) | | |
| 6002 | NaN | | El Salvador | |
| 6003 | NaN | | India | |
| 6004 | NaN | | Morocco | |
| 6000 | user_id | wmn_hh_cleaned | | |
| 6000 | wmn_5935911715471360 | 5.0 | | |
| 6001 | wmn_5669070061436928 | 4.0 | | |
| 6002 | wmn_5166259395362816 | 3.0 | | |

| | | |
|------|----------------------|-----|
| 6003 | wmn_6707197826564096 | 1.0 |
| 6004 | wmn_5560700467675136 | 4.0 |

[5 rows x 47 columns]

| | observation_id | submitted_time | gender | \ |
|------|---|--|------------------------|--------------------|
| 7000 | wmn_5782602368942080 | 2020-07-09 20:36:38.323 UTC | Female | |
| 7001 | wmn_5782723232006144 | 2020-07-17 17:09:22.504 UTC | Female | |
| 7002 | wmn_5782726889439232 | 2020-07-18 18:39:49.315 UTC | Female | |
| 7003 | wmn_5782841410715648 | 2020-07-09 21:52:56.873 UTC | Female | |
| 7004 | wmn_5784175870476288 | 2020-07-10 03:54:35.771 UTC | Female | |
| | Age(lvl) | | geography | \ |
| 7000 | 36 to 45 years old | | Suburban/Peri-urban | |
| 7001 | 36 to 45 years old | | Rural | |
| 7002 | 36 to 45 years old | | Suburban/Peri-urban | |
| 7003 | 36 to 45 years old | | Rural | |
| 7004 | 16 to 25 years old | City center or metropolitan area | | |
| | | financial_situation | \ | |
| 7000 | I can afford food and regular expenses, and bu... | | | |
| 7001 | I can afford food and regular expenses, and bu... | | | |
| 7002 | I cannot afford enough food for my family | | | |
| 7003 | I can afford food and regular expenses, and bu... | | | |
| 7004 | I can afford food and regular expenses, but no... | | | |
| | education | | employment_status | ethnicity \ |
| 7000 | Technical school | | Unemployed | Non-hispanic White |
| 7001 | College or university | | Employed full-time | Not Available |
| 7002 | Secondary/high school | | Unemployed | White |
| 7003 | Post graduate | | Employed full-time | Thai |
| 7004 | Secondary/high school | Student and work part-time | | Black |
| | religion | ... wmn_post_safe_place wmn_safe_place_no_access | \ | |
| 7000 | Catholicism | ... | NaN | NaN |
| 7001 | Catholicism | ... | NaN | NaN |
| 7002 | Protestantism | ... | NaN | NaN |
| 7003 | Buddhism | ... | NaN | NaN |
| 7004 | Catholicism | ... | NaN | NaN |
| | | wmn_safe_place_no_access_why wmn_pre_help wmn_post_help wmn_post_no_help | \ | |
| 7000 | | NaN | NaN | NaN |
| 7001 | | NaN | NaN | NaN |
| 7002 | | NaN | NaN | NaN |
| 7003 | | NaN | NaN | NaN |
| 7004 | | NaN | NaN | NaN |
| | wmn_no_help_why | country | user_id wmn_hh_cleaned | |
| 7000 | Nan | United States | wmn_5487139025846272 | 5.0 |
| 7001 | Nan | France | wmn_5696507059896320 | 7.0 |
| 7002 | Nan | Brazil | wmn_4656906910040064 | 5.0 |
| 7003 | Nan | Thailand | wmn_6002240641826816 | 2.0 |
| 7004 | NaN | Brazil | wmn_4645560312659968 | 4.0 |
| | 5 rows x 47 columns] | | | |
| | observation_id | submitted_time | gender | \ |
| 8000 | wmn_5962809465896960 | 2020-07-15 16:27:41.788 UTC | Female | |
| 8001 | wmn_5962853959073792 | 2020-07-10 02:30:07.631 UTC | Female | |
| 8002 | wmn_5963016228306944 | 2020-07-15 09:18:35.277 UTC | Female | |
| 8003 | wmn_5963029448753152 | 2020-07-17 23:06:00.019 UTC | Female | |
| 8004 | wmn_5963238224429056 | 2020-07-10 06:26:30.179 UTC | Female | |

| | Age(lvl) | geography | \ | | | |
|------|---|------------------------------------|-------------------|---------------------|--------------------------|-----|
| 8000 | 16 to 25 years old | Suburban/Peri-urban | | | | |
| 8001 | 26 to 35 years old | Suburban/Peri-urban | | | | |
| 8002 | 26 to 35 years old | City center or metropolitan area | | | | |
| 8003 | 26 to 35 years old | City center or metropolitan area | | | | |
| 8004 | 26 to 35 years old | Suburban/Peri-urban | | | | |
| | | financial_situation | \ | | | |
| 8000 | I can afford food and regular expenses, and bu... | | | | | |
| 8001 | I can comfortably afford food, clothes, and fu... | | | | | |
| 8002 | I cannot afford enough food for my family | | | | | |
| 8003 | I cannot afford enough food for my family | | | | | |
| 8004 | I can afford food and regular expenses, but no... | | | | | |
| | | education | employment_status | ethnicity | \ | |
| 8000 | Technical school | Student | | White | | |
| 8001 | College or university | Unemployed | | Bisaya | | |
| 8002 | College or university | Unemployed | | Bengali | | |
| 8003 | Technical school | Unemployed | Prefer not to say | | | |
| 8004 | Secondary/high school | Unemployed | | Other | | |
| | | religion | ... | wmn_post_safe_place | wmn_safe_place_no_access | \ |
| 8000 | Prefer Not To Answer | ... | | NaN | | NaN |
| 8001 | Christianity | ... | | NaN | | NaN |
| 8002 | Muslim | ... | | NaN | | NaN |
| 8003 | Catholicism | ... | | NaN | | NaN |
| 8004 | Christianity | ... | | NaN | | NaN |
| | | wmn_safe_place_no_access_why | wmn_pre_help | wmn_post_help | wmn_post_no_help | \ |
| 8000 | | NaN | NaN | NaN | | NaN |
| 8001 | | NaN | NaN | NaN | | NaN |
| 8002 | | NaN | NaN | NaN | | NaN |
| 8003 | | NaN | No | No | | No |
| 8004 | | NaN | NaN | NaN | | NaN |
| | | wmn_no_help_why | | country | \ | |
| 8000 | Nan | | | Brazil | | |
| 8001 | Nan | | | Philippines | | |
| 8002 | Nan | | | Bangladesh | | |
| 8003 | Nan | Venezuela (Bolivarian Republic of) | | | | |
| 8004 | Nan | | | Kenya | | |
| | | user_id | wmn_hh_cleaned | | | |
| 8000 | wmn_6726817374535680 | | 4.0 | | | |
| 8001 | wmn_6009680018014208 | | 4.0 | | | |
| 8002 | wmn_5205357623508992 | | 3.0 | | | |
| 8003 | wmn_4593323982979072 | | 3.0 | | | |
| 8004 | wmn_6534060449202176 | | 4.0 | | | |

[5 rows x 47 columns]

| | observation_id | submitted_time | gender | \ |
|------|----------------------|-----------------------------|--------|---|
| 9000 | wmn_6147215598026752 | 2020-07-11 00:13:01.7 UTC | Female | |
| 9001 | wmn_6147241736929280 | 2020-07-09 22:39:01.702 UTC | Female | |
| 9002 | wmn_6147317033074688 | 2020-07-09 21:36:37.829 UTC | Female | |
| 9003 | wmn_6147549733060608 | 2020-07-21 15:22:47.992 UTC | Female | |
| 9004 | wmn_6147688141946880 | 2020-07-13 14:34:00.872 UTC | Female | |

| | Age(lvl) | geography | \ |
|------|--------------------|-----------|---|
| 9000 | 26 to 35 years old | Rural | |

```

9001 26 to 35 years old                                     Rural
9002 26 to 35 years old City center or metropolitan area
9003 26 to 35 years old City center or metropolitan area
9004 16 to 25 years old                                     Rural

                                financial_situation \
9000           I can afford food, but nothing else
9001           I cannot afford enough food for my family
9002           I can afford food, but nothing else
9003 I can afford food and regular expenses, but no...
9004           I can afford food, but nothing else

      education   employment_status      ethnicity \
9000 College or university        Unemployed Non-hispanic White
9001 Secondary/high school      Self-employed      Hispanic
9002     Technical school      Employed part-time       Brown
9003     Post graduate      Employed full-time      Mestizo
9004 Secondary/high school          Student            Other

      religion ... wmn_post_safe_place wmn_safe_place_no_access \
9000    Agnosticism ...           Never             No
9001     Buddhism ...           NaN              NaN
9002 Protestantism ...           Rarely            Yes
9003      Other ...           NaN              NaN
9004 Catholicism ...           NaN              NaN

      wmn_safe_place_no_access_why wmn_pre_help wmn_post_help \
9000                   NaN      No      No
9001                   NaN      Yes      Yes
9002 Unable to access place due to lockdown           No      No
9003                   NaN      NaN      NaN
9004                   NaN      NaN      NaN

      wmn_post_no_help           wmn_no_help_why \
9000           No                  NaN
9001           Yes                 Did not know where to go
9002           Yes                 Services unavailable due to COVID-19 restrictions
9003           NaN                  NaN
9004           NaN                  NaN

      country           user_id wmn_hh_cleaned
9000     United States  wmn_5210637453492224      2.0
9001     United States  wmn_5398382580596736      7.0
9002       Brazil      wmn_6171219082608640      3.0
9003      Ecuador      wmn_4972509525180416      6.0
9004 Venezuela (Bolivarian Republic of)  wmn_5034094695284736      4.0

[5 rows x 47 columns]
      observation_id           submitted_time gender \
10000  wmn_6325627935522816 2020-07-16 22:57:37.982 UTC Female
10001  wmn_6325852246900736 2020-07-12 05:31:16.597 UTC Female
10002  wmn_6325890498953216 2020-07-10 07:06:12.803 UTC Female
10003  wmn_6325984250036224 2020-07-11 00:40:11.982 UTC Female
10004  wmn_6325999617966080 2020-07-10 04:19:38.102 UTC Female

      Age(lvl)           geography \
10000 26 to 35 years old City center or metropolitan area
10001 26 to 35 years old Suburban/Peri-urban
10002 16 to 25 years old          Rural
10003 16 to 25 years old City center or metropolitan area

```

10004 Over 45 years old City center or metropolitan area

| | | |
|-------|---|-----------------------|
| | | financial_situation \ |
| 10000 | I cannot afford enough food for my family | |
| 10001 | I cannot afford enough food for my family | |
| 10002 | I cannot afford enough food for my family | |
| 10003 | I can afford food, but nothing else | |
| 10004 | I can afford food and regular expenses, but no... | |

| | | | |
|-------|---|--------------------|--------------------|
| | education employment_status ethnicity \ | | |
| 10000 | College or university | Self-employed | White |
| 10001 | Secondary/high school | Unemployed | Non-hispanic White |
| 10002 | Post graduate | Student | Other |
| 10003 | College or university | Student | Bisaya |
| 10004 | College or university | Employed full-time | White |

| | | | |
|-------|---|------------|-----|
| | religion ... wmn_post_safe_place wmn_safe_place_no_access \ | | |
| 10000 | Other ... | Don't know | No |
| 10001 | Other ... | NaN | NaN |
| 10002 | Muslim ... | Every day | Yes |
| 10003 | Christianity ... | NaN | NaN |
| 10004 | Catholicism ... | NaN | NaN |

| | | | |
|-------|---|-----|-----|
| | wmn_safe_place_no_access_why wmn_pre_help wmn_post_help \ | | |
| 10000 | | NaN | No |
| 10001 | | NaN | NaN |
| 10002 | Unable to access place due to lockdown | | No |
| 10003 | | NaN | NaN |
| 10004 | | NaN | NaN |

| | | | | |
|-------|--|-------|---------------|----------------------|
| | wmn_post_no_help wmn_no_help_why country user_id \ | | | |
| 10000 | Yes | Other | Colombia | wmn_6272960260734976 |
| 10001 | NaN | NaN | United States | wmn_5546604446089216 |
| 10002 | No | NaN | India | wmn_5098040953405440 |
| 10003 | NaN | NaN | Philippines | wmn_5859651998711808 |
| 10004 | NaN | NaN | Brazil | wmn_6411825098260480 |

| | |
|-------|----------------|
| | wmn_hh_cleaned |
| 10000 | 3.0 |
| 10001 | 4.0 |
| 10002 | 1.0 |
| 10003 | 4.0 |
| 10004 | 4.0 |

[5 rows x 47 columns]

| | | | |
|-------|--|-----------------------------|--------|
| | observation_id submitted_time gender \ | | |
| 11000 | wmn_6511962105315328 | 2020-07-18 18:37:43.664 UTC | Female |
| 11001 | wmn_6512175847047168 | 2020-07-12 17:00:48.138 UTC | Female |
| 11002 | wmn_6512190943395840 | 2020-07-14 13:08:53.911 UTC | Female |
| 11003 | wmn_6512346035126272 | 2020-07-12 19:53:07.274 UTC | Female |
| 11004 | wmn_6512413949296640 | 2020-07-10 18:46:54.907 UTC | Female |

| | | |
|-------|----------------------|----------------------------------|
| | Age(lvl) geography \ | |
| 11000 | 36 to 45 years old | City center or metropolitan area |
| 11001 | 16 to 25 years old | City center or metropolitan area |
| 11002 | 16 to 25 years old | City center or metropolitan area |
| 11003 | 26 to 35 years old | City center or metropolitan area |
| 11004 | 26 to 35 years old | City center or metropolitan area |

| | |
|--|-----------------------|
| | financial_situation \ |
|--|-----------------------|

11000 I can afford food and regular expenses, but no...
 11001 I can afford food and regular expenses, but no...
 11002 I can afford food and regular expenses, but no...
 11003 I can comfortably afford food, clothes, and fu...
 11004 I can afford food and regular expenses, but no...

| | education | employment_status | ethnicity | religion | \ |
|-------|-----------------------|--------------------|-----------|----------------|---|
| 11000 | College or university | Employed part-time | Arab | Muslim (Sunni) | |
| 11001 | Secondary/high school | Unemployed | Mestizo | Catholicism | |
| 11002 | Secondary/high school | Employed full-time | Sunda | Protestantism | |
| 11003 | Post graduate | Unemployed | Amazigh | Muslim (Sunni) | |
| 11004 | College or university | Employed part-time | Mestizo | Catholicism | |

... wmn_post_safe_place wmn_safe_place_no_access \

| | | | | |
|-------|-----|--------|-----|--|
| 11000 | ... | NaN | NaN | |
| 11001 | ... | NaN | NaN | |
| 11002 | ... | Rarely | No | |
| 11003 | ... | NaN | NaN | |
| 11004 | ... | Never | No | |

wmn_safe_place_no_access_why wmn_pre_help wmn_post_help \

| | | | | |
|-------|--|-----|-----|-----|
| 11000 | | NaN | NaN | NaN |
| 11001 | | NaN | NaN | NaN |
| 11002 | | NaN | No | No |
| 11003 | | NaN | NaN | NaN |
| 11004 | | NaN | No | No |

wmn_post_no_help wmn_no_help_why \

| | | | |
|-------|-----|---|-----|
| 11000 | | NaN | NaN |
| 11001 | | NaN | NaN |
| 11002 | | No | NaN |
| 11003 | | NaN | NaN |
| 11004 | Yes | Services unavailable due to COVID-19 restrictions | |

country user_id wmn_hh_cleaned

| | | | |
|-------|-----------|----------------------|-----|
| 11000 | Yemen | wmn_5873757554475008 | 5.0 |
| 11001 | Colombia | wmn_5907256912904192 | 4.0 |
| 11002 | Indonesia | wmn_6061376079659008 | 2.0 |
| 11003 | Algeria | wmn_6538195564232704 | 3.0 |
| 11004 | Chile | wmn_5790297809485824 | 4.0 |

[5 rows x 47 columns]

| | observation_id | submitted_time | gender | \ |
|-------|----------------------|-----------------------------|--------|---|
| 12000 | wmn_6693115098562560 | 2020-07-16 02:12:12.432 UTC | Female | |
| 12001 | wmn_6693171805552640 | 2020-07-10 02:28:06.53 UTC | Female | |
| 12002 | wmn_6693410984689664 | 2020-07-10 19:03:36.215 UTC | Female | |
| 12003 | wmn_6693438029561856 | 2020-07-11 12:30:32.574 UTC | Female | |
| 12004 | wmn_6693632611713024 | 2020-07-24 06:50:35.159 UTC | Female | |

Age(lvl) geography \

| | | |
|-------|--------------------|---------------------|
| 12000 | 36 to 45 years old | Suburban/Peri-urban |
| 12001 | 26 to 35 years old | Suburban/Peri-urban |
| 12002 | 16 to 25 years old | Suburban/Peri-urban |
| 12003 | 16 to 25 years old | Suburban/Peri-urban |
| 12004 | 26 to 35 years old | Suburban/Peri-urban |

financial_situation \

| | | |
|-------|---|--|
| 12000 | I can comfortably afford food, clothes, and fu... | |
| 12001 | I can afford food and regular expenses, but no... | |
| 12002 | I can afford food, but nothing else | |

```

12003      I cannot afford enough food for my family
12004      I cannot afford enough food for my family

          education    employment_status   ethnicity    religion \
12000  College or university  Employed full-time      Batak  Protestantism
12001  College or university  Employed full-time      Bisaya Christianity
12002      Technical school        Student      Kikuyu Christianity
12003  Secondary/high school     Self-employed Indigenous Catholicism
12004  Secondary/high school     Unemployed      African Christianity

          ... wmn_post_safe_place wmn_safe_place_no_access \
12000  ...                 NaN             NaN
12001  ...                 NaN             NaN
12002  ...           Every day            Yes
12003  ...                 NaN             NaN
12004  ...       Once a week            Yes

          wmn_safe_place_no_access_why wmn_pre_help wmn_post_help \
12000                               NaN             NaN             NaN
12001                               NaN             NaN             NaN
12002           Decline to respond            Yes             Yes
12003                               NaN             NaN             NaN
12004  Fear of being infected with COVID-19            No             No

          wmn_post_no_help          wmn_no_help_why \
12000           NaN                  NaN
12001           NaN                  NaN
12002           Yes           Don't know
12003           NaN                  NaN
12004           Yes  Embarrassed for myself or my family

          country          user_id wmn_hh_cleaned
12000      Indonesia  wmn_4815019333648384      3.0
12001      Philippines  wmn_6023620248731648      8.0
12002          Kenya  wmn_4527118632878080     10.0
12003  Venezuela (Bolivarian Republic of)  wmn_4866210443558912      5.0
12004  United Republic of Tanzania  wmn_4771454425235456      2.0

```

[5 rows x 47 columns]

In []: