No-Show Appointments Data Analysis

Questions:-

1. How Many F&M Who're Show Their appointment and who aren't ?
2. How Many F&M Who're in scholarship program and Show Their appointment and who aren't

Steps To Investigate My Questions:-

- **prepare dataset to use**
  1. first import necessary packages (pandas,numpy,matplotlip) .
  2. load dataset .
  3. get summary of the dataset and fount that there is no null value and there are some columns with wrong datatype(PatientId,ScheduledDay,AppointmentDay) .
  4. convert columns to their right datatype .
  5. convert columns names to lower case and replace '-' with '_' to be much easier when accessing them .
  6. Check for duplicated rows .
  7. Check if there is wrong data inserted and found that there are negative values inserted for age .
  8. View some statistical about data using describe function .
- **Answer Questions:-**

Question 1 :-

1. create two variable
   one have the data which no_show == "No" (Show Appointment)
   and the second one for who didn't show (no_show == "Yes")
2. for each variable in step (1) counted groupby gender
3. make a visulalization for step (2)
4. from visulization found that

- number of female is larger than number of male in both cases (showing & not showing) .
- number of female who’re showing their appointment is greater than who didn’t show .
- number of male who’re showing their appointment is greater than who didn’t show .

Question 2 :-

1. create two variable
   one have the data which no_show == “No” and scholarship == 1 (Show Appointment and in scholarship program)
   and the second one for who didn’t show and didn’t in scholarship program (no_show == “Yes”&scholarship==0) .
2. for each variable in step (1) counted groupby gender .
3. make a visulalization for step (2) .
4. from visulization found that
   - number of female is larger than number of male in both cases .
   - number of female who’re not in scholarship program and not showing their appointment is greater than who did .
   - number of male who’re not in scholarship program and not showing their appointment is greater than who did .