Facebook user data Analysis:

Programming Language	:	Python
IDE	:	Google Colaboratory

Firstly, I imported the necessary and important libraries for the analysis i.e Numpy, Pandas, matplotlib.pyplot and seaborn, After that I imported the data set.

After Importing data set, I did basic analysis related to data set by checking head of data set, information about data variables and describing the data set, and I also find the variables which has the null values. I found that 'gender' has 175 Null values and "tunure" has 2 Null values.

As per your first question I impute the missing values.

1(a) I replace the missing values in 'gender' by its mode because gender is categorical data.

(Please refer this article for better understanding:https://heartbeat.fritz.ai/data-handling-scenarios-part-2-working-with-missing-values-in-a-dataset-34b758cfc9fa)

1(b) I replace the missing values in 'tunure' by its median because tunure is Numerical data. (Most of the cases in dealing missing values of numerical variable we can use median or mode)

2) I showed correlation matrix and Heatmap(To show correlation between all variables in the given data set)

3(a) What is composition of male and female users?
In our data set we have 59.3% male users and 40.6% of female users.

3(b) Which category of gender has more friends?
Female users has more friends (9740258)

3(b) Which category of gender initiated more friendships?
Male users are Initiated more friendships (6053223)

4(a) How many users have no friends?
1962 users has no friends

4(b) How many users did not like any posts?
22308 users did not like any posts

4(c) How many users did not receive any likes?
24428 users did not receive any likes

5(a) What is the average number of posts liked by users (based on gender) through web vs. mobile devices?

	Mobile_likes	www_likes
Female	173	87
Male	60	24

Female users average mobile_likes and WWW_Likes are high

5(b) What is the average number of likes received by users (based on gender) through web vs. mobile devices?

	Mobile_likes_received	www_likes_received
Female	147	104
Male	41	27

Female users average mobile_likes_received and WWW_Likes_received are high