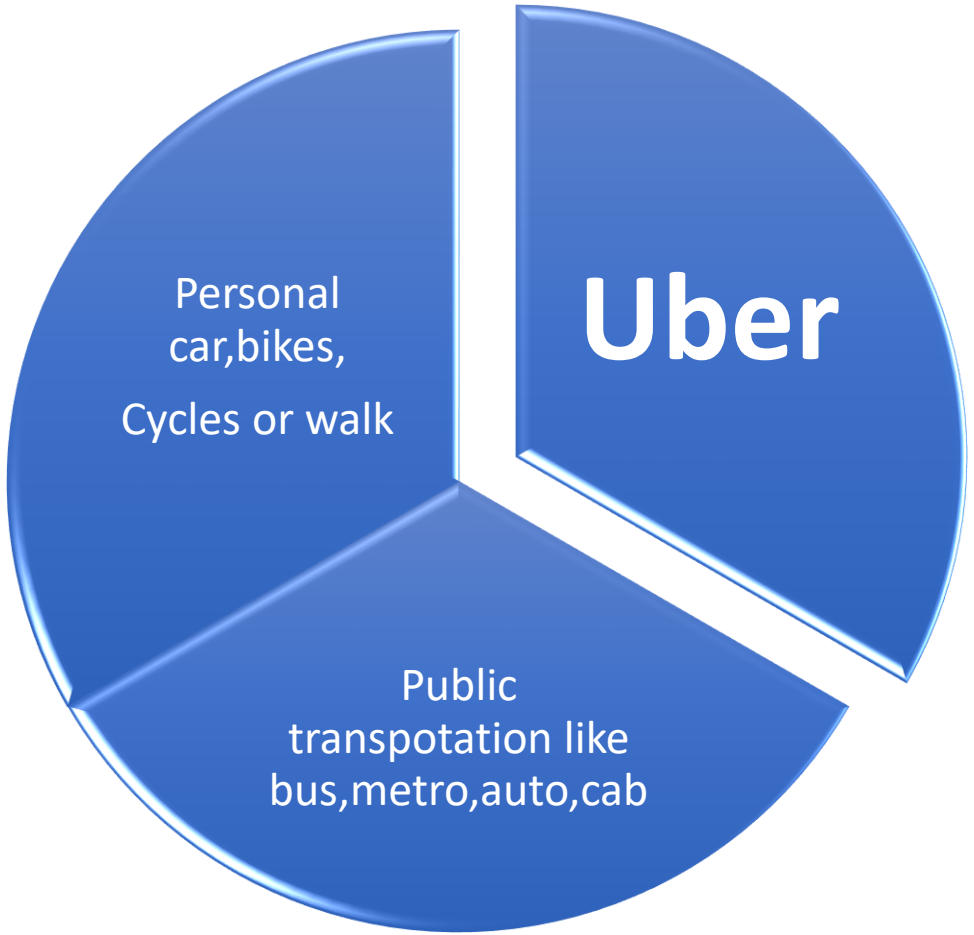
GUESSTIMATE

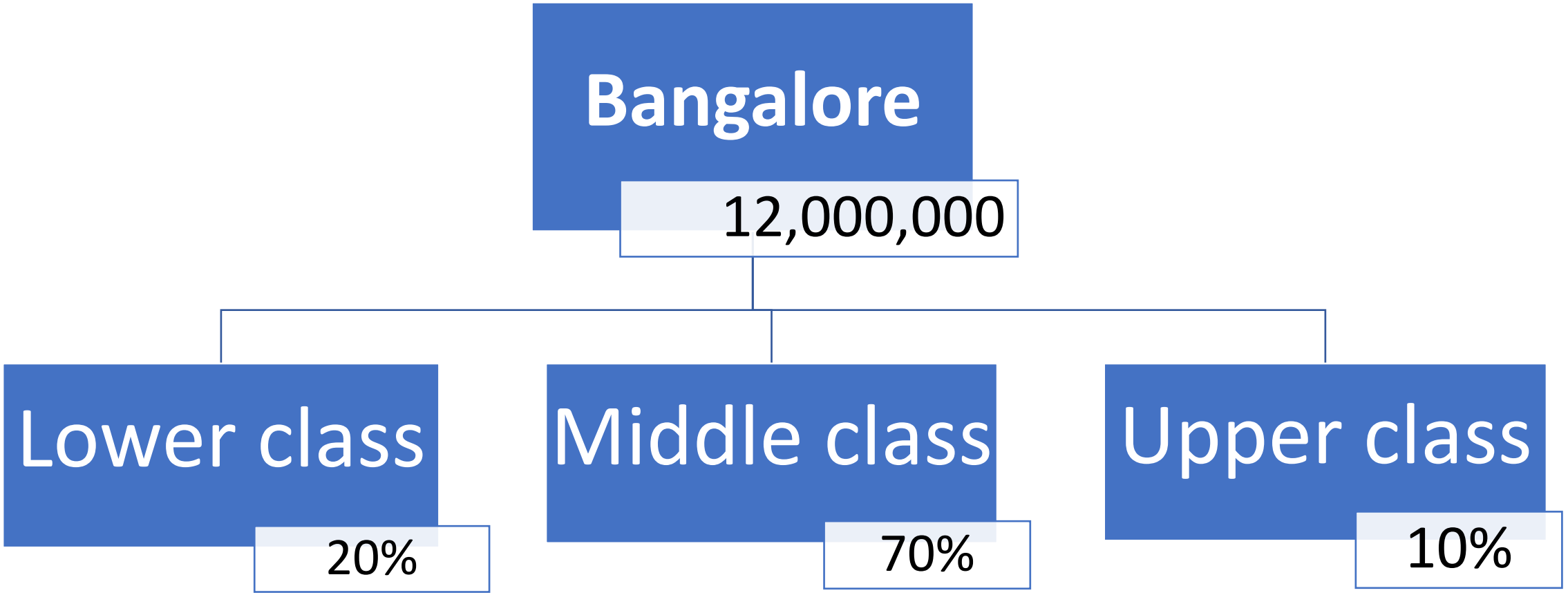
"Estimate the number of Uber cars plying on Bangalore roads in a day?"

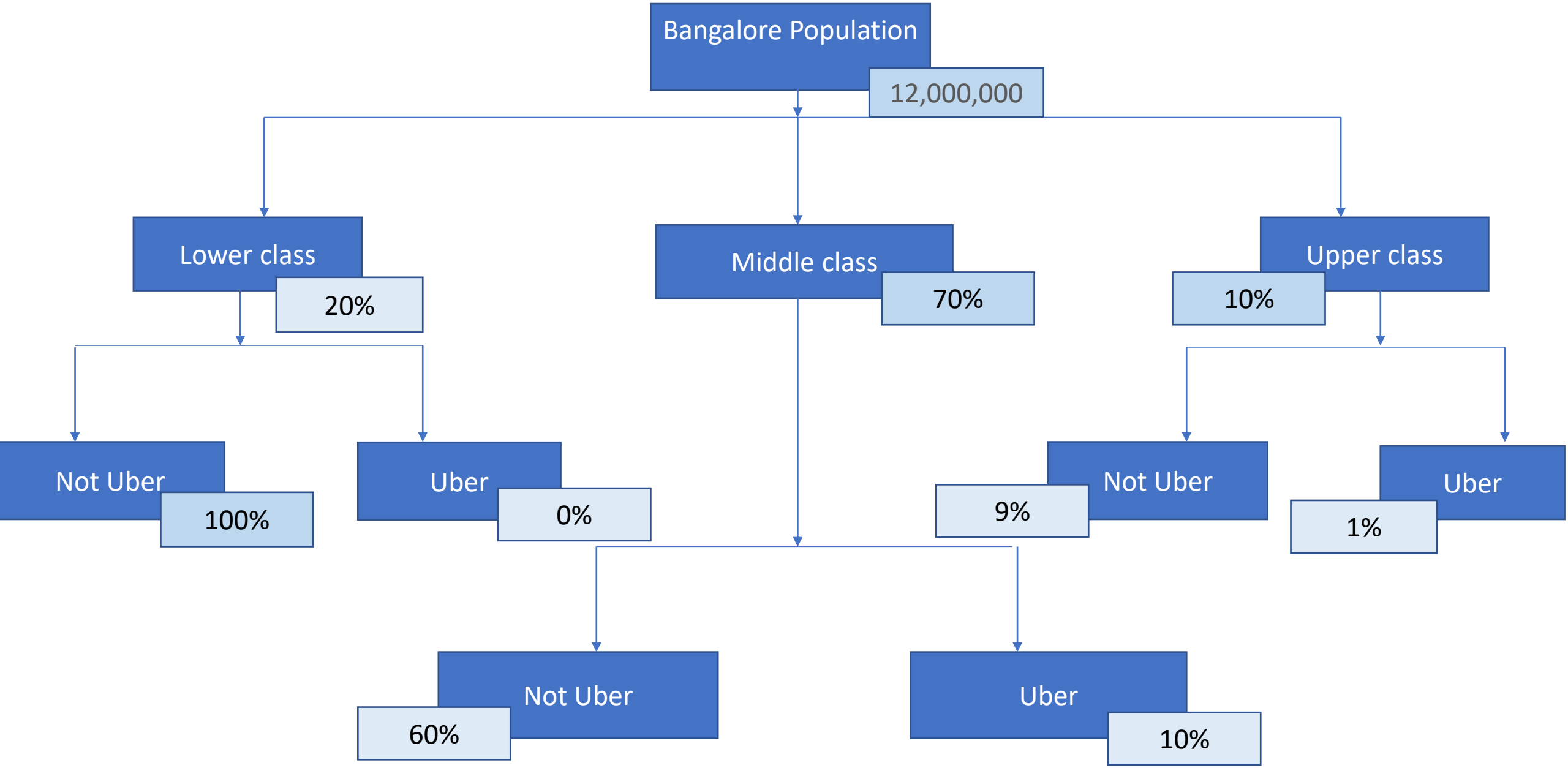
Solution :

- **Step 1- Population of Bangalore**
- Population is growing steadily, with no fast-paced growth. Population is inclusive of people living in Mumbai, along with people traveling there for business or pleasure purposes**.** Population of bangalore is 12,000,000
- Bangalore population in any given day – 12crore(assumption)
- Based on monthly income, lets segregate the population:
- 70% middle class
- 10% upper class
- 20% lower class
- Lower income class would use Cab service rarely and hence we can ignore them. Our target population is the middle class and upper class.

- **Step2: No of ways one could commute in Mumbai**
  1) Walk
  2) Bike/bicycle
  3) Auto
  4) Car
  5) Cab
  6) Bus
  7) Metro
- For our potential market, there are various modes of transportation such as public transportation, motor bikes, cycles, as well as personal cars. Some might even prefer walking most of the times. Public transportation occupies a major chunk in this pie with 50% of the share.


Personal
car,bikes,
Cycles or walk
Uber
Public
transpotation like
bus,metro,auto,cab


Bangalore
12,000,000
Lower class
20%
Middle class
70%
Upper class
10%


Bangalore Population
12,000,000
Lower class
20%
Middle class
70%
Upper class
10%
Not Uber
100%
Uber
0%
Not Uber
9%
Uber
1%
Not Uber
60%
Uber
10%

Calculation:

- Now, with the help of assumptions made calculate the final number
- Assuming that middle class population are 70%;
- Lets assum that 25% people will take Public transportation like bus,metro,atuo etc.
- 25% people have there own car,bike,cycle and some people use to walk.
- So 30% people will take online auto and cab like uber and ola,rapido.

Now we assum that 10% people will take uber.

Bangalore Populetion =12,000,000

Middle class =70%

Middle class population = 12,000,000*70% = 8,400,000

10% people use uber

8,400,000*10% =840,000

Uber user = 840,000

- Assuming that upper class population are 10%;.
- 8% people have there own car,bike,cycle and some people use to walk.
- So 2% people will take online auto and cab like uber and ola,rapido

  Now we assum that 1% people will take uber.

Upper class = 10%

Upper class population = 12,000,000*10% = 1,200,000

1% people use uber

1200,000*1% =12,000

Uber user = 12,000

Total No. of uber user = 840,000 + 12,000 = 852,000

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- **Potential customers =**Making an assumption of Avg **3ppl per trip**, we arrive at 284,000 Uber trip per day.
- Let’s assume, an average uber operates for 12 hours i.e. 8 am to 8pm
- Peak hours – 8 am to 11 am
- Minimum – 11 am to 3 pm
- Moderate – 3 pm to 5 pm
- Peak hours – 5 pm to 8 pm
- Lets assume one trip on average is 10 KM long in Bnagalore, and the average velocity of the uber is 40 KMPH. Thus, average time to commute or trip period is ideally 15 mins. However, considering the traffic time and waiting time, one average trip period can be assumed to be **40 mins**.
- Number of trips in peak hours i.e. between 8 am to 11 am = 4 trips appx.
- #trips in minimum hours = 1 trips
- #trips in moderate hours = 1.5 trips
- #trips in peak hours = 4 trips appx.
- **Thus, an avg. uber takes 10 trips daily.**

- Therefore,

(284,000 trips)/(10trips per Uber) = 28,400

The solution is 28,400 **Uber** cars plying on Bangalore roads in a day