Solved Guesstimates:

Q1. Estimate the number of hours air conditioners are run in Delhi over a year.

Total population of New Delhi ~= 1.8 crore.
Neglecting BPL : 30% of 1.8 cr.
Therefore, we are left with 1.26 cr.
Now let us assume that the spending power of the city is restricted between 25-60 years of age.
The percentage of population lying in this segment is: 40% i.e. 0.4*1.26~50 lacs. Now, we also make an assumption that the male: female ratio is 1:1.
Therefore the male population= 25 lacs. We will further categorise them income group wise: Category Low income Middle income High Income Very High Income Percentage 30% 50% 15% 5%
Population (lacs) 7.5 12.5 3.75 1.25
The low income group may not afford ACs and is dependent upon coolers/fans. The middle income group will have 1-2 AC per household.
The High Income group will have 3-4 ACs per household.
The very High Income group will have 7-8 ACs per household.
Total no. of ACs in the households = 1.5*12.5+3.5*3.75+7.5*1.25= 41.25 lacs AC units.
Considering an average of 10 hours that ACs are run in Households, total no. of hours in the household= 41.25*365=15056.25 million hours.
Now, teens within age group 18-25 living independently, For males= 20%*12 million = 2.4 million For females= 20%*12 million= 2.4 million
And assuming on an average, 2 persons share a room = 1.2+1.2= 2.4 million Considering 50% have AC in their rooms= 1.2 million AC and hours they run their ACs for = 6 hours on an average
Therefore total hours= 1.2*180*6 = 1296 million hours
Now, there are shops, malls, factories and industries where bulbs are used
Considering the fact, only 10% of the population is involved in shops and retails = 1.8 million
Considering on an average 3-4 people are involved in one shop or retail = 0.5 million
Average AC = 2, therefore total ACs= 1.0 million Hours they operate in a day= 8 hours
Total hours = 1.0*2*8*180 = 2765 million hours
Malls are quite large in number in New Delhi, Considering at least 10 malls in each district, so total malls = 110 malls
And each mall has centrally air conditioned system which runs for nearly 12 hours a day
So total number of hours = 12*110*180 = 237600 hours Industries use ACs in large quantity.
Considering around 5 industries in each district, total industries = 55
Number of ACs in each industries = 50 (considering small scale industries)
Total number of ACs used by an industry ~= 3000 ACs
So total number of AC hours = 3000*180*15 = 8100000 hours

Considering Airports, Total number of working ac hours = 24 hours in a day Hours for which centrally air conditioned system operates = 180*24= 4320 hours
Considering Metro, Total number of working hours- 16 hours Centrally air conditioned So total number of working hours = 16*180 = 2880 hours At Bus stand and railway stations, No of AC are comparatively low in number, assuming total number of ACs= 50 Hours for which they remain on = 20 hours Total number of hours = 20*50*180 = 180000 hours
So total number of hours for which AC are on = 15056.25 million hours + 1296 million hours + 2765 million hours +237600 hours + 4320 + 2880 + 180000 hours= 19117424800 hours.

Q2. Estimate the number of males who get a haircut in Delhi in 1 day?

Total number of districts in Delhi - 11 districts and at the rate of 20 barber shops per district we will get 220 barber shops in Delhi.
Assuming average working hours of a Barber shop (7 AM to 9 PM with 1 hour gap)= 13 hours. At any time in a shop there
are on an average 3 chairs. Also, let's assume an average of
waiting customer to be 3.
Average waiting time= 15 mins (precisely the time a customer getting a haircut takes on average).
Now, 2 of every 3 customers want a haircut. During peak time, i.e morning 7-10 AM and Evening 6 to 9 PM (i.e. 5 hours) we will have 12 customers per hour in the shop of which 2/3 will get a haircut.
Therefore, 8/ hour for 5 hours of peak time i.e. 40 haircuts.
During the lean period, i.e. 10AM to 6 PM (7 hours, since an hour of lunch excluded) the no of customers at any time is <4.
Therefore, Assuming 6 customers per hour of which 4 get a haircut.
Therefore, total no. of haircuts= 7*4=28. Total 68 customers per day per barber shop.
Total no. of shops= 220. Therefore total no. of haircuts= 220*68=14960.

Q3. Estimate the market for Pepsi in India.

Total population of India = 1.3 billion Now considering 30% of population is below poverty line, so only 70% would be consuming soft drinks = 70% of 1.3 billion = 0.9 billion
Considering the market is full of competitors, about 30% would be consuming pepsi depending upon the brand value= 0.3*0.9 billion ~= 0.27 billion
Now considering the income groups…… 30% would be low income groups, 50% would be middle income and 20% would be high income groups. So low income groups = 0.3*0.27 billion = 0.08 billion Middle income group = 0.5*0.27 billion= 0.14 billion
High income groups = 0.2*0.27 billion= 0.054 billion Now low income group would be spending on an average around 30 Rs on Pepsi in a week, therefore market size = 0.08 * 30* 365 = 576 billion/7=83 billion

Middle income group would be spending on an average around 50+30 Rs on Pepsi in a week, therefore market size= 0.14*80*365 = 584 biilion High income group would be spending on an average around 130 Rs on Pepsi in a week, therefore market size= 0.054 * 130* 365/7= 366 billion Therefore total market size for Pepsi is = 83+584+366=INR 1033 billion i.e. $17.21 billion.

Q4. Estimate Youtube's revenue on weekends in India

Total Population = 1.2 billion You Tube Users = 3%

Lets say on an average a You Tube user watches around 70 videos in a month. Total Video Views (Month): 1,200,000,000 * 3% * 70

Assuming a 30 day month, Total Video Views (Daily): 1,200,000,000 * 3% * 70 / 30

Lets assume that on an average there is 20% increase in viewing on weekends Total Video Views (Weekends): 1,200,000,000 * 3% * 70 *1.20 *2 / 30 =

(Multiplied by 2, considering Saturday and Sunday as weekends)

Lets assume that YouTube is able to Monitize 20% of the views. Monitizable Views = 201,600,000 *0.20

On an average CPV is 0.45

YouTube earnings through monetizable views = 201,600,000 *0.20 * 0.45 = INR 18,144,000

YouTube charges around INR 600,000 per day for its Masthead ads

Total Earnings of you tube on a Weekend in India = INR (18,144,000 + 1,200,000) = INR 19,344,000

201,600,000 views

Out of the earnings from monetizable views, YouTube gives back 55% to the content creators (people who have uploaded the videos) and keeps 45% as platform owners.

Net Earnings = INR (18,144,000*0.45 + 1,200,000) = INR 9,364,800

Unsolved Guesstimates

- Annual revenue of a 5 star hotel in Goa
- Annual Revenue of Sock Industry in India
- Are there more iPhones in operation in the U.S. or in China?
- Breakeven of an airline
- Calculate a salon's revenue for a week
- Elevator demand for a fictitious city
- Estimate computers repaired in Nehru Place in a year
- How many flat screen televisions have been sold in India in the past 12 months?
- How many flights depart in a week from Delhi airport
- How many iPhones are currently being used in India?
- How many school teachers are there in Delhi?
- How many trees are there in Delhi?
- Market size of footballs in India
- Market size of Jhandu Balm
- Number of airplanes at airport
- Number of Band-aids sold in India
- Number of bandaids used in Delhi everyday
- Number of cars parked in a mall/ Revenue
- Number of crocins sold in Delhi
- Number of elevators in Gurgaon
- Number of iPhones sold between September to December
- Number of Kinley bottles sold in a year
- Number of mineral water bottles sold in Delhi in a day
- Number of people flying in and out of Delhi everyday
- Number of vehicles that pass the toll in a week
- Petrol consumption in a day
- Quantity/Market size of noodles sold/ manufactured
- Revenue of a stadium
- Revenue of a Yoga Studio in a 2BHK- revenue/costing
- Revenue of cricket stadium
- Revenue of London Olympics
- Revenue of Oberoi group of hotels
- Toll gate revenue and factors impacting it
- What is the monthly profit of your favorite restaurant?
- What is the Revenue for the smartphone market in India?
- What is the size of the pedigree market in Delhi?
- Estimate the revenue of Taj Hotel in Agra, solely from the rooms
- Market size of spectacle/contact lens industry in the US
- Number of Nike shoes sold in India
- Number of paint cans required to paint Bombay black
- Number of cans used to repaint cars in Delhi
- Number of red swifts in Delhi

- Estimate the annual market size formal ties in India
- Estimate the number of school going children in India
- Estimate the number of three wheelers in Delhi
- Estimate the daily revenue of all rickshaw walas in North campus
- Estimate amount of money transacted in McDonalds Kamla Nagar in a single day
- Estimate the number of cheese burst pizzas sold in India in a week
- Estimate the number of photos of Indian on Facebook
- Estimate the number of Indians on Twitter
- Estimate the average number of books read by an Indian in his lifetime
- Estimate the average daily amount of water consumed by a typical Indian HH
- Estimate the number of mangoes in an average sized mango orchard
- Estimate the volume of water that is required to submerge FMS
- Estimate the smileys used in daily electronic conversations in delhi
- Estimate the number of caps worn in Delhi in a given day

- Estimate the annual market size of socks in India
- Estimate the number of married women in India at present
- Estimate the number Indians awake post midnight on a given day (weekend)
- Estimate the number of cycles you could park in the FMS lawns

- Estimate the total road length(in km) in India
- Estimate the number of light bulbs currently in use in New Delhi
- Estimate the annual market size for sports shoes in India
- Estimate the number of golf balls that can fit in a Boeing 747 airplane
- Estimate the number of customers visiting the nearest McDonalds in a day
- Estimate the market size for chewing gum in Indian on an annual basis
- Estimate the number of hours air conditioners are run in Delhi over a year
- Estimate the revenue from hotels and lodges in Goa in a year
- Estimate the average distance run by a football player in an average match
- Estimate the average number of airlines that depart from Delhi airport in a day
- Estimate the average footfall in the Delhi metro on a given day (weekday)
- Estimate the number of movies released in India in a year
- Estimate the number of ATMs currently in working condition in Delhi

- Estimate the market size of football sportswear in India
- Estimate the number of dogs in Delhi
- Estimate the annual market size for sports shoes in India
- Estimate the amount of power consumed by FMS in a day
- Estimate the number of videos streamed on Youtube in Delhi on a given day
- Estimate the amount of data(GB) of internet used in a single day in Delhi
- Estimate the amount Delhi spends on street food in a month
- Estimate the revenue of Haldirams food chain in India in a single day
- Estimate the number of airplane that fly over FMS on a given days
- Estimate the number of golf balls that can fill a football stadium completely
- Estimate the number of rickshaw walas in north campus
- Estimate the number of SRK fans in India
- Estimate the amount of money withdrawn from ATMs in Delhi on a single day

- Estimate number of bananas consumed in Delhi on a given day (by all species!)
- Estimate the market size for cigarettes in India
- Estimate the amount of time spent on video calling in Delhi in a day
- Estimate the number of wooden doors in colleges in North campus
- Estimate the number of haircuts in Delhi on a given day
- Estimate the voice revenue for Airtel from customers in Delhi on a given day
- Estimate the time spent by Delhi on tying shoe laces on a given day
- Estimate the number of cows in Delhi
- Estimate the time weekly milk consumption in Delhi
- Estimate the number of South Indians in Delhi university