PROBLEM STATEMENT

What is the total number of fresher jobs (0-2 years' experience) that get fulfilled in India?

ASSUMPTIONS

1. We do not consider the population that does not enter the Indian job market (people who go abroad to work/ study)
2. Rural and urban job opportunities: Lack of opportunities in both the population is considered due to caste bias/ gender discrimination/ poverty due to which students are forced to discontinue their education to work/stay at home.
3. Majority of PhD students start working in the same institute/college.
4. Total population of India is assumed to be 100 crores (1 Billion).
5. Proportion of Indian population that are students is assumed to be 30% (30 crores).
6. The number of people with a year or less of experience is assumed to be the number of fresher who get placed the previous year.
7. The number of people with two years of experience is assumed to be the number of freshers who got placed two years ago along with students who were previously unemployed and got placed the same year.

APPROACH

This is a *top down* question. We estimate the number of fresh high school pass outs / college graduates of India who get employed each year along with job seekers with 1-2 years of experience to reach the total number of fresher jobs that get fulfilled in a year in India.

We consider 6 categories of job seekers who join the Indian job market -

1. Number of students who drop out/fail intermediate school examination (**Xth**) and begin working the same year.
2. Number of students who drop out/fail intermediate school examination (**XIIth)** and begin working the same year.
3. **Fresh college graduates** who start working the same year. (on/off campus placements)
4. Students who were **previously unemployed** but get a job after a year.
5. Working people who switch from jobs 0>x>=1 years of experience.
6. Working people who switch from jobs 1>x>=2 years of experience.

Category 3 is further divided into -

a. **Undergraduate** students who start working the same year.
b. **Postgraduate** students who start working the same year.
c. **PhD** students who start working the same year.

d. Others (**Diploma/ PG Diploma/ certificate course**) students who start working the same year.

Total population of India: **100 crores**

Total student population of India: **30 crores (30% of the total population)**

Category 1

- Student population appearing for Xth Board Examination every year - **7% (.07*30*10^7 = 2 crore)**
  - Those who pass and join the next grade: **80% (.8*2*10^7 = 1.6 crore)**
  - Those who do not pass : **20% (.2*2*10^7 = 40 Lakhs)**
    - Those who appear again : **80% (.8*4*10^6 = 36 Lakhs)**
    - Those who cannot/do not need to work (join farming/family business, get married etc.) : **10% (.1*4*10^6 = 4 Lakhs)**
    - Those who start working the same year : **10% (.1*4*10^6 = 4 Lakhs)**

Category 2

- Student population appearing for XIIth Board Examination every year - **5% (1.5 crore)**
  - Those who pass and join the next grade: **70% (1.05 crore)**
  - Those who do not pass : **30%(45 Lakhs)**
    - Those who appear again : **60% (27 Lakhs)**
    - Those who cannot/do not need to work (join farming/family business, get married etc.) : **20%(9 Lakhs)**
    - Those who start working the same year : **20%(9 lakhs)**

Category 3

This category comprises of **10%** of the student population, i.e., **4 crore** students graduate in India every year.

Sub-category 1:

- Undergraduate students - **80% (3.2 crore)**
  - Those who study further: **15% (48 Lakhs)**
  - Those who join business/farming/get married and do not work etc. : **5% (1.6 Lakhs)**
  - Those who remain unemployed : **50% (1.6 crore)**
  - Those who get placed (on/off campus) : **30% (1.28 crore)**

Sub-category 2:

- Postgraduate students - **10% (40 Lakhs)**
  - Those who study further: **5% (2 Lakhs)**
  - Those who join business/farming/get married and do not work etc. : **5% (2 Lakhs)**
  - Those who remain unemployed : **50% (20 Lakhs)**
  - Those who get placed (on/off campus) : **40% (16 Lakhs)**

Sub-category 3:

- PhD students - **5% (20 Lakhs)**
  - Those who remain unemployed : **5% (2 lakh)**
  - Those who start working: **90% (18 Lakh)**

Sub-category 4:

- Diploma/ PG Diploma/ Certificate course students - **5% (20 Lakhs)**
  - Those who remain unemployed : **40% (8 Lakhs)**
  - Those who study further : **20% (4 Lakhs)**
  - Those who get placed (on/off campus) : **40% (8 Lakhs)**

Category 4

- Students who were unemployed but get placed after a year or two:
  40% of total unemployed = 40% of (200 Lakhs {160 Lakhs + 20 Lakhs + 2 Lakhs + 8 Lakhs }) = 8 Lakhs

Category 5

- Working people who switch from jobs 0>x>=1 years of experience:
  20% of previous year freshers who get placed = 10% of (2 crore) = 20 Lakhs

Category 6

- Working people who switch from jobs 1>x>=2 years of experience:
  20% of working class with 2 years or less experience = 30% of (2.5 crore) = 75 Lakhs

TOTAL FRESHER JOBS THAT GET FULFILLED IN A YEAR :

	Qualification	Number of students who start working the same year
1	X	4 lakhs
2	XII	9 lakhs
3	Under Graduate	1.28 crore
4	Post Graduate	16 lakhs
5	PhD	18 lakhs
6	Diploma/PG Diploma/Certificate course	8 lakhs
7	Students who get placed after a year	8 lakhs
8	People who switch from jobs after a year	20 lakhs
9	People who switch from jobs after two years	75 lakhs
	Total:	**2.86 crore = 3 crore (approximately)**