Write a Python Program to make the gross pay, annual income and income tax calculator using following data.

The gross pay consists of Basic Pay, House Rent Allowance (hra), Dearness Allowance (dra), other allowances and professional tax and provident fund.

Gross Pay= Basic Pay+ House Rent Allowance (hra) + Dearness Allowance (dra) +other allowances +Transport Allowance (TA)- Professional tax -Employees' Provident fund (EPF)

Basic Pay for different grade levels are indicated in table given.

The Professional tax remains constant and that is equal to 200 Rs. for each grade levels and each month.

House Rent Allowance (hra) varies as per the city- For Class 1 Cities it is 0.3 times of Basic Pay of each grade levels, for Class 2 Cities it is 0.2 times of Basic Pay of each grade levels, for Class 3 Cities it is 0.1 times of Basic Pay of each grade levels,

Dearness Allowance (dra)= 0.5 times of Basic Pay of each grade levels, Other allowances are given in table which varies according to different grade levels, Provident Fund= 0.11 times of Basic Pay for each grade levels, Transport Allowance remains constant as 900 Rs. for each levels.

For different grade pays:

Grade Levels	Basic Pay (in Rs.)	Other Allowances (in Rs.)
A (Considered as highest grade pay)	60000	8000
В	50000	7000
С	40000	6000
D	30000	5000
E	20000	4000
F	10000	3000

The gross pay calculated is only for one month.

After calculating Gross Pay of each employee calculate the annual pay for employee by multiplying gross pay calculated, by 12.

So, Annual Pay of an employee=Gross Pay of an employee*12

From Annual Pay of an Employee Calculate the income tax as per the slabs of India Income Tax 2022-23 given below.

Tax Slabs for AY 2022-23

Amount in Rs.	Income Tax Rate	
Up to Rs. 2,50,000	0%	
Rs. 2,50,001 to Rs.5,00,000	5% above Rs. 2,50,000	
Rs. 5,00,001 to Rs. 7,50,000	10% above Rs. 5,00,000 + Rs. 12,500	
Rs. 7,50,001 to Rs. 10,00,000	15% above Rs. 7,50,000 + Rs. 37,500	
Rs. 10,00,001 to Rs. 12,50,000	20% above Rs. 10,00,000 + Rs. 75,000	
Rs. 12,50,001 to Rs. 15,00,000	25% above Rs. 12,50,000 + Rs. 1,25,000	
Above Rs. 15,00,001	30% above Rs. 15,00,000 + Rs. 1,87,500	

Input & Output:

Enter the grade_level (A,B,C,D,E or F:) A
city 1 is a tier 1 (metro), city 2 is tier 2 and city 3 is tier 3
Enter the city (1,2 or 3) 1

Gross Pay of an Employee is: 110100.0

Annual income of an employee is: 1321200.0

Income Tax to be paid by an employee is: 142800.0