



Nombre del Alumno: Gael Federico López Ochoa

Nombre del tema: ejecución

Parcial: 4

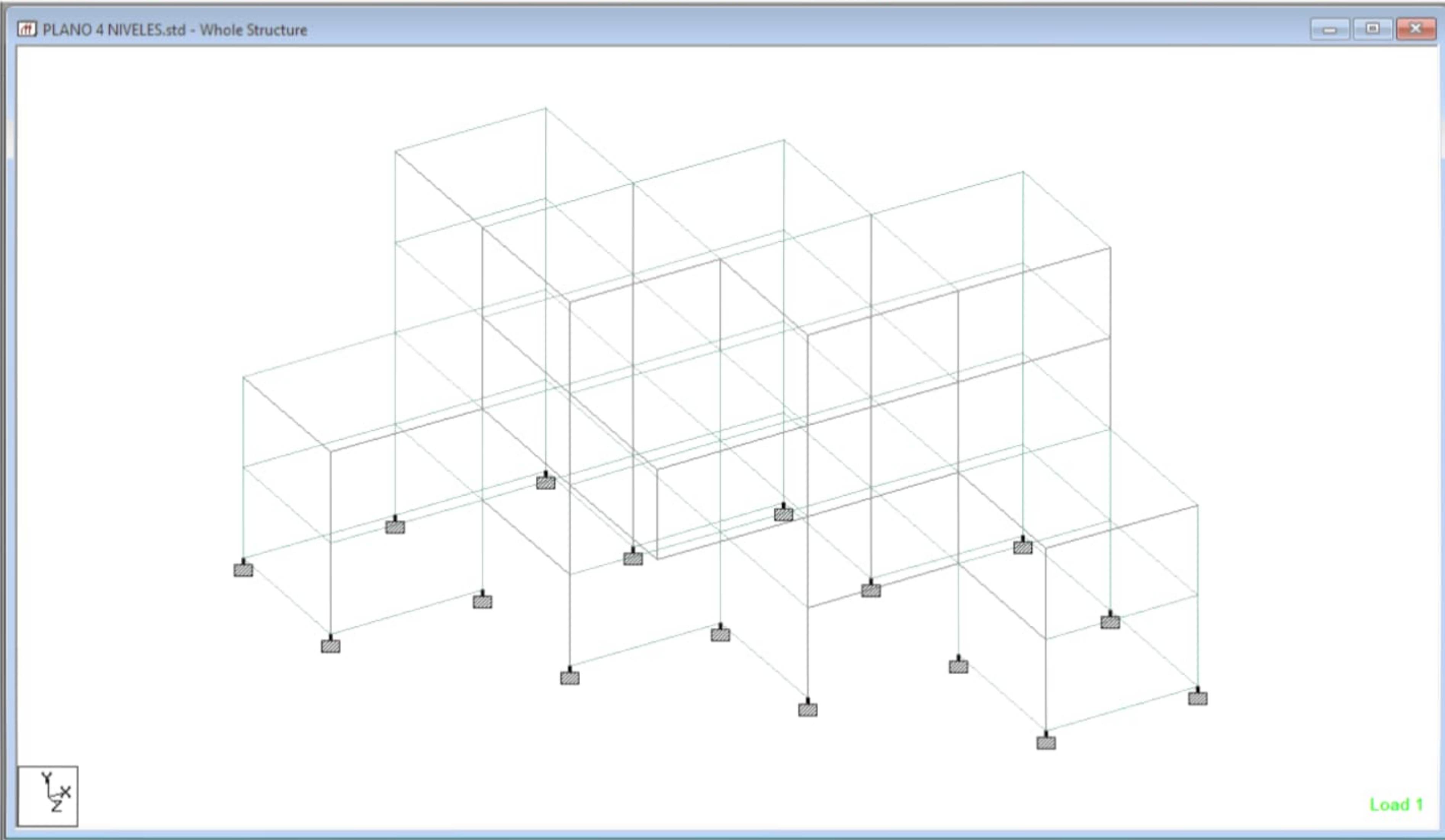
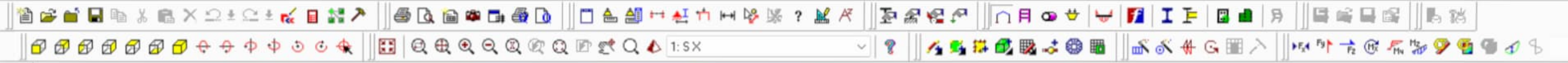
Nombre de la Materia : análisis de estructuras

Nombre del profesor: Pedro Alberto García lopez

Nombre de la Licenciatura: arquitectura

Cuatrimestre: 5

Lo que hicimos fue, aplicarle cargas para ver si pasaba con las cargas y movimientos sísmicos, ya que no pasaba le tuvimos que poner muro de block para reforzar



PLANO 4 NIVELES.std - Job I...

Job

Project

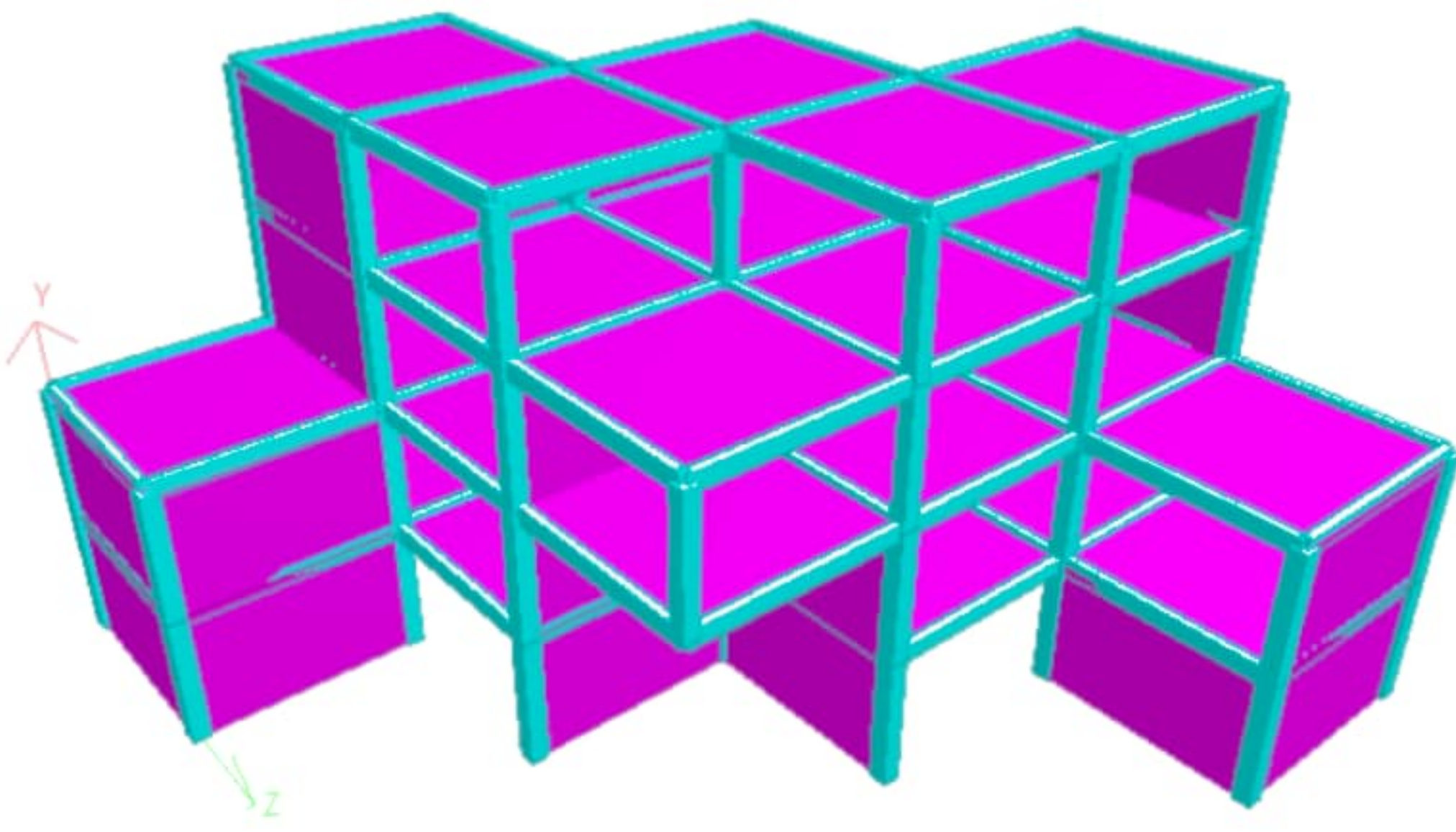
Job Name : PLANO 4 NIVELES.std

Date : 04-Apr-2024 08:51 AM

Job Number : 6815 [More...](#)

Engineer	Checker	Approved
-Mar-24		

[Help](#)





STAAD Analysis and Design

```

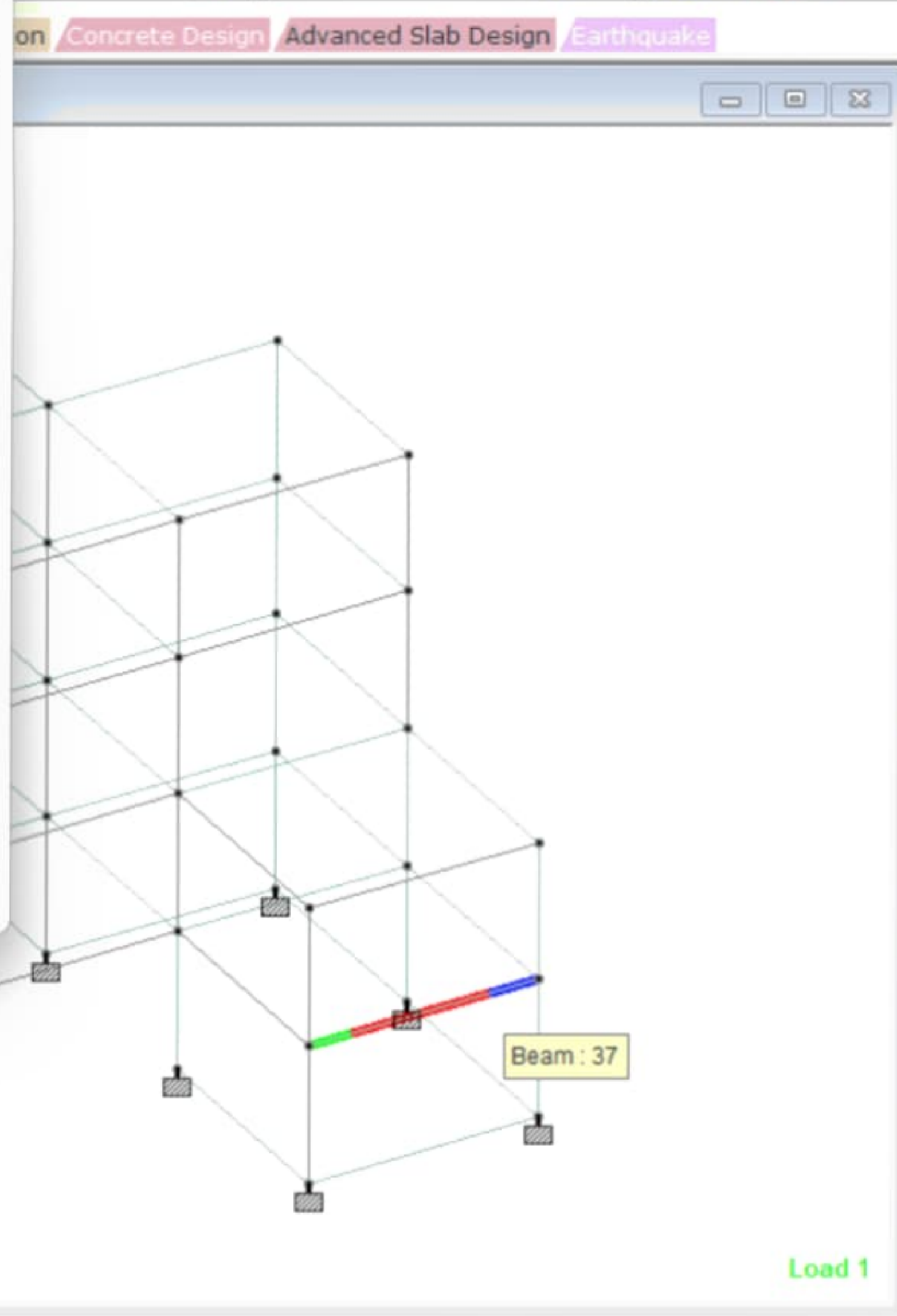
++ Read/Check Data in Load Cases ... 22:37:53
++ Using In-Core Advanced Math Solver 22:37:54
++ Processing and setting up Load Vector. 22:37:54
++ Processing Element Stiffness Matrix. 22:37:54
++ Calculating Member Forces. 22:37:54
++ Analysis Successfully Completed ++
++ Processing Element Forces. 22:37:55
++ Processing Element Corner Forces. 22:37:55
++ Processing Element Stresses. 22:37:55
++ Performing Concrete Design 22:37:55
++ Calculating Section Forces1. 22:37:55
++ Calculating Section Forces2. 22:37:55
++ Calculating Section Forces3. 22:37:55
++ Start Concrete Design ... 22:37:55
++ Creating Displacement File (DSP)... 22:37:55
++ Creating Reaction File (REA)... 22:37:55
++ Calculating Section Forces1-110. 22:37:55
++ Calculating Section Forces2. 22:37:55
++ Calculating Section Forces3. 22:37:55
++ Creating Section Force File (BMD)... 22:37:56
++ Creating Section Displace File (SCN)... 22:37:56
++ Creating Element Stress File (EST)... 22:37:56
++ Creating Element JT Stress File (EJT)... 22:37:56
++ Creating Element JT Force File (ECF)... 22:37:56
++ Creating Design information File (DGN)... 22:37:56
++ Done. 22:37:56

0 Error(s). 1 Warning(s). 1 Note(s)

++ End STAAD.Pro Run Elapsed Time = 3 Secs
C:\Users\gaelo\OneDrive\Escritorio\TAREAS G\ARQUI PE...anl
    
```

View Output File
 Go to Post Processing Mode
 Stay in Modeling Mode

Done



PLANO 4 NIVELES.std - Nod...

Node	X m	Y m	Z m
1	0.000	0.000	0.000
2	5.000	0.000	0.000
3	0.000	0.000	5.000
4	5.000	0.000	5.000
5	10.000	0.000	0.000
6	10.000	0.000	5.000
7	5.000	0.000	10.000
8	10.000	0.000	10.000
9	15.000	0.000	5.000
10	15.000	0.000	10.000
11	10.000	0.000	15.000
12	15.000	0.000	15.000
13	20.000	0.000	10.000
14	20.000	0.000	15.000
15	20.000	0.000	20.000
16	15.000	0.000	20.000

PLANO 4 NIVELES.std - Bea...

Beam	Node A	Node B	Property Refn
1	1	17	4
2	3	19	4
3	20	4	4
4	2	18	4
5	5	21	4
6	22	6	4
7	9	25	4
8	7	23	4
9	8	24	4
10	10	26	4
11	13	29	4
12	14	30	4
13	12	28	4
14	11	27	4
15	16	32	4

Load 1



- NOTES
- WARNING
- RESULTS
- CONCRETE DESIGN

```

REQD STEEL= 229.MM2, RHO=0.0033, RHOMX=0.0190 RHOMN=0.0033
MAX/MIN/ACTUAL BAR SPACING= 254./ 37./ 43. MMS
REQD. DEVELOPMENT LENGTH = 503. MMS
-----
    
```

Cracked Moment of Inertia Iz at above location = 23386.9 cm⁴

REQUIRED REINF. STEEL SUMMARY :

SECTION (MM)	REINF STEEL(+VE/-VE) (SQ. MM)	MOMENTS (+VE/-VE) (KNS-MET)	LOAD (+VE/-VE)
0.	32./ 211.	4./ 25.	1/ 6
417.	27./ 126.	3./ 15.	1/ 6
833.	22./ 60.	3./ 7.	1/ 10
1250.	29./ 11.	4./ 1.	7/ 10
1667.	66./ 0.	8./ 0.	6/ 0
2083.	100./ 0.	12./ 0.	6/ 0
2500.	113./ 0.	14./ 0.	6/ 0
2917.	103./ 2.	13./ 0.	6/ 1

-----< PAGE 7 Ends Here >-----

STAAD SPACE -- PAGE NO. 8

3333.	72./ 7.	9./ 1.	6/ 1
3750.	32./ 12.	4./ 2.	9/ 1
4167.	5./ 45.	1./ 6.	2/ 8
4583.	5./ 109.	1./ 13.	2/ 6
5000.	6./ 191.	1./ 23.	2/ 6

B E A M N O. 17 D E S I G N R E S U L T S - S H E A R

AT START SUPPORT - Vu= 23.81 KNS Vc= 55.46 KNS Vs= 0.00 KNS