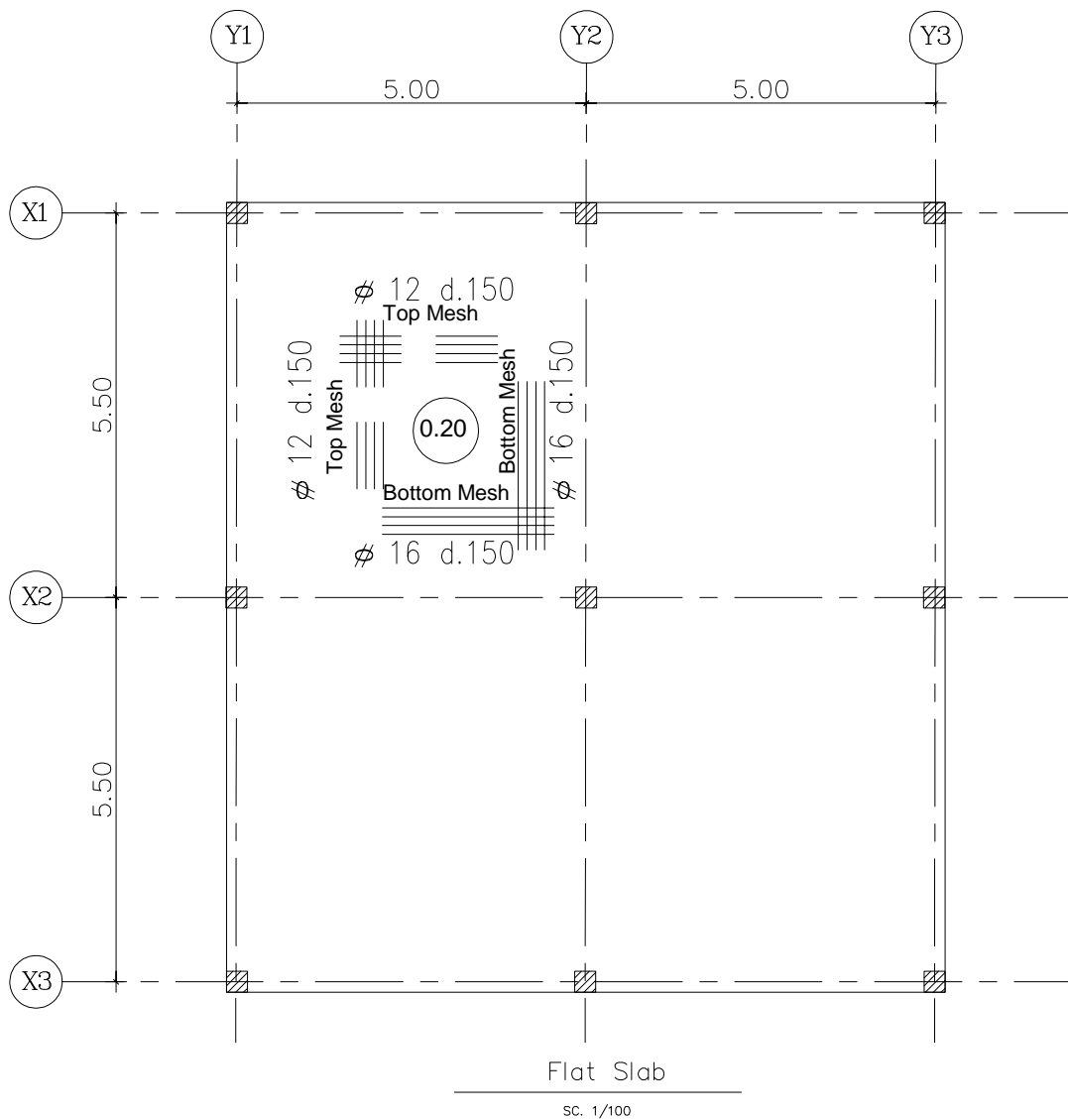


For the following figure:

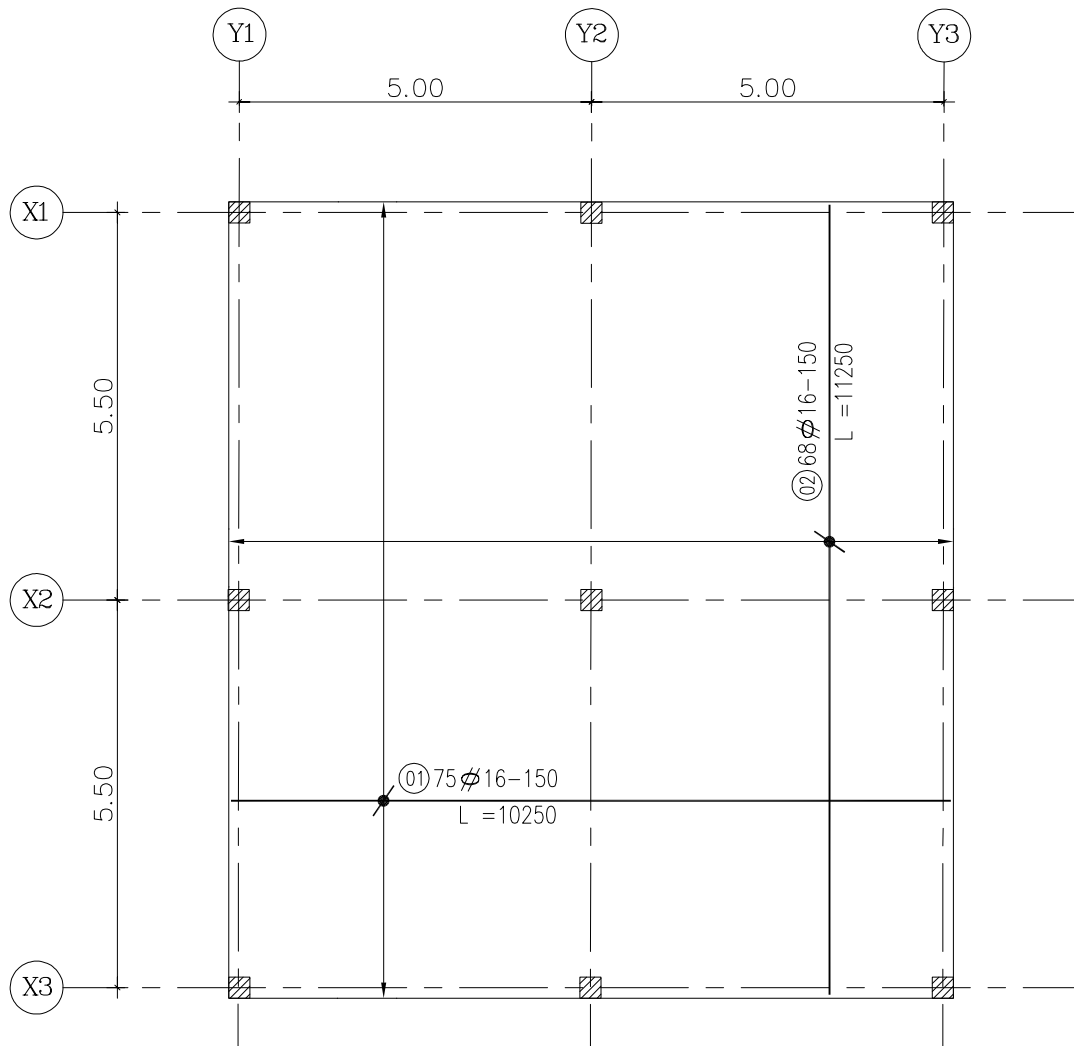
- 1- Draw the slab layout using the AutoCAD program.
- 2- Calculate the necessary reinforcement quantities for casting the slab.
- 3- Draw a plan indicating bar marks and lengths for all bars.
- 4- Draw the bar bending schedule (BBS) using the AutoCAD program.



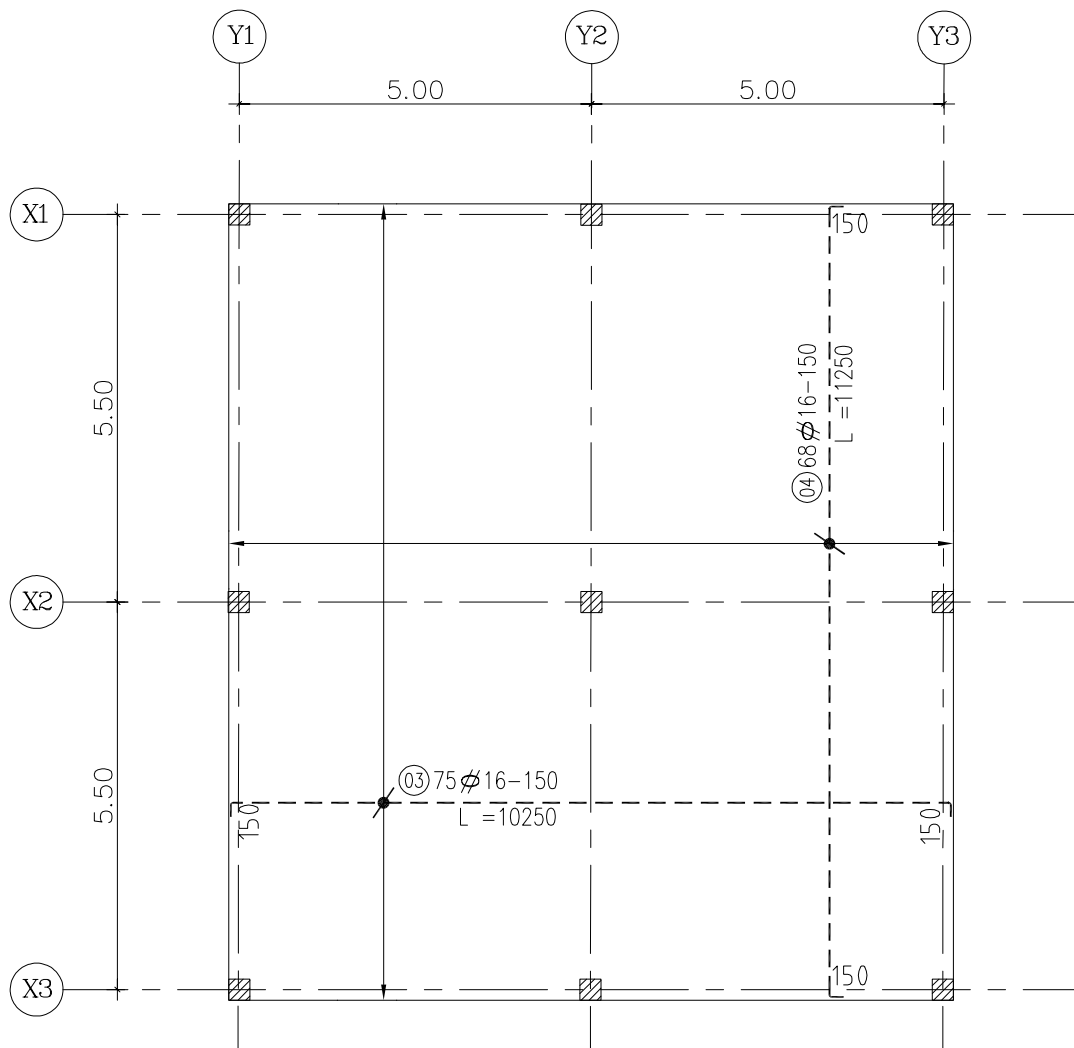
Rebars Weight		Diameter	Unit Wt (kg/m)
Diameter	Unit Wt (kg/m)		
φ 8	0.394	φ 16	1.578
φ 10	0.617	φ 18	1.998
φ 12	0.888	φ 20	2.466
φ 14	1.208	φ 22	2.984
		φ 25	3.853

* Concrete grade
 For Plain Concrete $f_{cu}=20 \text{ N/mm}^2$
 For Reinforcing Concrete $f_{cu}=30 \text{ N/mm}^2$

LOCATION	CLEAR COVER
FOUNDATION	75 mm
BEAMS AND COLUMNS	30 mm
SLABS	25 mm



BOTTOM REINFORCEMENT DETAILS



Top REINFORCEMENT DETAILS

Bar Bending Schedule

Bar mark	Type and size	No. of memb.	No. of bars in each memb.	Total No.	Length	memb.	Shape & Dimension	Total Weight (Kg)
	mm				mm			(Kg)
01	ϕ 16	1	75	75	10250	Boff	<p>A=10250 A</p>	1213
02	ϕ 16	1	68	68	11250	Boff	<p>A=11250 A</p>	1207
03	ϕ 12	1	75	75	10550	Top	<p>A=150 A B=10250 B</p>	703
04	ϕ 12	1	68	68	11550	Top	<p>A=150 A B=11250 B</p>	698

Total Weight			
Diameter	Weight (kg)	Diameter	Weight (kg)
ϕ 12	1392	ϕ 18
ϕ 16	2420		