**Design of Residential Apartment Building by using STAAD PRO**

**Abstract:**

The mission of our task is to layout the given Residential Apartment touching on Indian Standard codes. The layout of a constructing may be achieved manually or with the assist of Software. We have selected to do our project with Software due to the fact designing manually consumes lot of time, attempt and may incorporate mistakes whereas through the use of software we can keep time and gain outcomes without mistakes. As noted above, we've used software named „STAAD‟ abbreviated as “Structural Analysis And Design Software. The purpose of the usage of the software is that it's miles consumer friendly and has unique functions love it designs the structural components in my view at the side of their Analysis and Results. Another beneficial function of this software program is that we can view the Shear pressure, Bending moment, Torsion diagrams at each degree of the building. The procedure accompanied by way of us is as follows: We have accrued the drawing plans alongside its specification from the construction site. After analyzing the plan and its criteria we've got started out our venture with the aid of designing the structural additives of constructing particularly slabs, beams, columns and footings. The layout of slab turned into designed via us as mentioned inside the plan after which we've got positioned the columns in their favored places. Then we've given the cloth properties together with their grades to beams and columns.

**Keywords**: Shear Force, Bending Moment, Post-Processor, Slabs, Beams, Columns, Footings.