To match students to colleges using a matching algorithm and the algorithm takes preference lists as input i.e. to match students to colleges, student need to list out the colleges they want in a preference order. The example of the preference list is as follows:

1. VJTI, Mumbai(CSE)
2. COEP, Pune(Mech)
3. COEP, Pune(CSE)
4. WCE, Sangli(CSE)

   …..and so on.

In order to produce the most desirable output, the list should be of maximum size i.e. every student should fill out as many colleges as possible. The student will definitely get the best possible institute in his list. Considering the scenario of Maharashtra, state has 799 Engineering colleges, assuming each college has 5 branches, the student should fill out 799*5=3995 preferences and it is not possible for a student to fill out 3995 preferences. So, here comes into view '*The automatic preference list Generator*'. The work of the generator is to automatically create the preference list and appending it after the preferences given by the student. For the generation of preference list, '*Fuzzy control system*' is used.

A *Fuzzy control system* is a control system based on fuzzy logic – a mathematical system that analyses analog input values in terms of logical variables that take on continuous values between 0 and 1, in contrast to classical or digital logic, which operates on discrete values of either 1 or 0. For taking admission to any institute, certain parameters are considered which are as follows:

1. Quality of Education
2. Placements
3. Fees
4. Infrastructure and Resources
5. Geographical location
6. Academic performance of college in university exams
7. Alumni records

   …..and so on.

The preference list is generated considering the above factors and ranging it on a certain scale. Quantitative evaluation of college will be done by the authorities thereby assigning a score out of 100 for the above parameters. For example, consider a college and the parameter values are as follows:

1. Quality of Education : 80/100
2. Placements : 80/100
3. Fees : 95/100
4. Geographical location : 100/100

   …and so on.

The above scores will be taken into consideration to generate the preference list. An example is set up by '*National Institutional Ranking Framework*' which is a central governmental organization that does the evaluation of colleges. These kind of evaluations are necessary to be done to keep the track of performance of colleges in its jurisdiction.

The above parameter values will be given to the *Fuzzy control system* as an input and result will be generated in the form of score to generate the ranking of colleges for a particular student i.e. the colleges ranking will be different for different students. Considering the current scenario of admission procedure, the system works on approximation from the student side i.e. referring to various cut-off lists of colleges. The system which is stated above will be very helpful to the student living in remote areas having lack of knowledge about this domain. So, the new system should be introduced.

Introducing this new system will be a big revolution in the 20th century thereby improving and empowering the whole system to reach new pinnacle. The new system will complete its execution in one go i.e. only one round is required.