Introduction:

This system has been specifically developed to introspect the inner mechanism of the AnglaBangla MAT System. This human computer interface provides a platform where user can visualize the module level linguistic phenomenon of a translation process. S/he can get a clear perception of linguistic construction of input sentence and also can enjoy the flavor of source to target language generation process. In this way, any language researcher can learn the step-by-step module level working procedure of a Machine Translation System. For example if anybody wants to see the output of the preprocessor module of the AnglaBangla System for a given sentence, say, “The meeting will be held on 21.10.2010”, the job of the preprocessor is to identify the date part in between the sentence, and it will generate a tag for the date part, keeping the other part of the sentence unchanged and the corresponding date will be stored in a table for the post processor. Now, with the help of this Step-wise-AnglaBharati system, one can see the output of the preprocessor for the particular sentence just by selecting the preprocessor module and running it. The system will give an output like, “The meeting will be held on fff01”, where “fff01” is generated by the preprocessor for the date part and a table is maintained for the actual date, which will be positioned as it is after translation of the whole sentence, with the help of the post-processor. The output is shown in Fig.1.

In Stepwise Analyser of AnglaBharati System, one can stop the MAT system at some specific point and see the output at that step. So, this system can be used as a debugging tool for AnglaBharati MAT System. The user can stop the system in following eight specific steps and see the output after specific step execution. The steps are as follows:

1) Preprocessing
2) Examplebase
3) Noun Phrase Generator
4) Lexical Analysis
5) Morphological Analysis
6) Text-Synthesis
7) Text-Generation
8) Postprocessing