

***Report on programming Assignment-2***  
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In this assignment we were asked to develop a program which can convert a html file into a latex file and generate a pdf. To help us in the development process we also were provided a startup project with some basic solution. In the given resources we had a proper guidance about the process of running the program. In the given folder there was a lex file. Our main task was to add some additional functionalities to making the program working perfectly. I modified the given lex file to make it working for the given hmtl files. So this program can be run according to the given guidance in our example folder.

To solve this problem it is mandatory to have some basic knowledge in regular expression, pattern matching and C programming. As the given lex file was a combination of lex syntax and C, I had to study about some regular expression and lex syntax. After searching a lot I replaced the html tags with the latex one in proper way. Then I executed it according to the guidance.

I used the vim as the text editor for implementing this program. It was a little bit tough to debug for me. For testing, I used the given three input files and matched my output with the given ones. I also tested my program using some examples from the Internet. So far, it is good and output is correct for every run.

The problem was not a algorithmic one. But I faced a lot problem with lex syntax and regular expression. As there is not enough resources in the Internet I had to struggle a lot to match the pattern. I faced the main difficulty with nested condition matching. After trying in different ways finally I succeed. At the eleventh hour I found some good documentation and it helped me a lot.