

```
1: #ifndef MARKOVMODEL_HPP_
2: #define MARKOVMODEL_HPP_
3: #include <string>
4: #include <map>
5:
6: class MarkovModel{
7: public:
8:     MarkovModel(std::string text, int k);
9:     ~MarkovModel();
10:    int order();
11:    int freq(std::string kgram);
12:    int freq(std::string kgram, char c);
13:    char randk(std::string kgram);
14:    std::string gen(std::string kgram, int T);
15:    friend std::ostream& operator<<(std::ostream& out, MarkovModel& M
M);
16:
17: private:
18:     int Order;
19:     std::string _text;
20:     std::map <std::string, int> _kgrams;
21:     std::string _alphabet;
22: };
23:
24: #endif
```