```cpp
/*
   | Hashing |
   Desc: Hashing with base B and mod M.
   Source: USACO Guide
   State: Its USACO Guide
*/

class HashedString {
  private:
      // change M and B if you want
      static const long long M = 1e9 + 9; //882517247 //905798389 //854099959
      static const long long B = 9973;

      // pow[i] contains B^i % M
      static vector<long long> pow;

      // p_hash[i] is the hash of the first i characters of the given string
      vector<long long> p_hash;

  public:
      HashedString(const string &s) : p_hash(s.size() + 1) {
              while (pow.size() <= s.size()) { pow.push_back((pow.back() * B)
% M); }

              p_hash[0] = 0;
              for (int i = 0; i < s.size(); i++) {
                      p_hash[i + 1] = ((p_hash[i] * B) % M + s[i]) % M;
              }
      }

      long long get_hash(int start, int end) {
              long long raw_val = (p_hash[end + 1] - (p_hash[start] * pow[end
- start + 1]));
              return (raw_val % M + M) % M;
      }
};
vector<long long> HashedString::pow = {1};
```