```
#ifndef STOCHPARAMS H
                                 #ifndef MODELPARAMS H
#define STOCHPARAMS H
                                  #define MODELPARAMS H
class StochParams {
                                  class ModelParams {
public:
                                  public:
  int N samples, Trajectories;
                                    double beta I, beta H, beta F;
  int I init, S init, H init;
                                    double alpha, gamma h, theta 1;
  int F init, R init, E init;
                                    double delta 1, delta 2, gamma f;
  double t final;
                                    double gamma i, gamma d;
  StochParams();
                                    ModelParams();
  ~StochParams();
                                    ~ModelParams();
#endif
                                  #endif
```