

```

/** This file is part of the MOOSE framework
/** https://www.mooseframework.org
/**
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#pragma once

#include "ComputeElasticityTensorBase.h"
#include "RankTwoTensor.h"
#include "RankFourTensor.h"
#include "RankTwoScalarTools.h"

/**
 * ComputeLinearElasticityTensor defines an elasticity tensor material for
 * isotropic materials in which the elastic constants (Young's modulus and Poisson's ratio)
 * vary as defined by material properties.
 */
class ComputeElasticityTensor : public ComputeElasticityTensorBase
{
public:
    static InputParameters validParams();

    ComputeElasticityTensor(const InputParameters & parameters);

protected:
    virtual void initQpStatefulProperties() override;
    virtual void computeQpElasticityTensor() override;

    const Real & _K;
    const Real & _pa;
    const Real & _n;

    MaterialProperty<Real> & _S30;
    const MaterialProperty<Real> & _S30_old;

    const MaterialProperty<RankTwoTensor> & _stress_old;

    RankFourTensor _Cijkl;
};

```