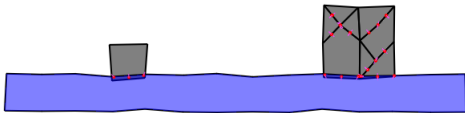# Mini Report for Project FEM & Fracture

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Here we show the results for my FEM system with each example in folder dataFracture.

Note that ALL the parameters are set by defaults, except the *material toughness* which is clarified as below:
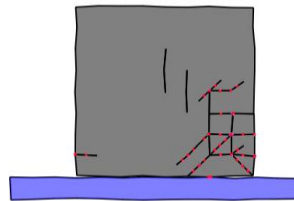
Simple 0 (toughness = 1)

```
particles = 66
time = 3.280
<comments>
h = 0.01
substeps = 1
```
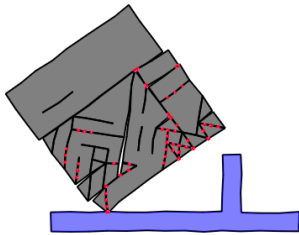
Simple 1 (toughness = 100)

```
particles = 276
time = 5.240
<comments>
h = 0.01
substeps = 1
```

Simple 2 (toughness = 100)

```
particles = 331
time = 2.980
<comments>
h = 0.01
substeps = 1
```

Simple 3 (toughness = 700)

```
particles = 32
time = 11.260
<comments>
h = 0.01
substeps = 1
```
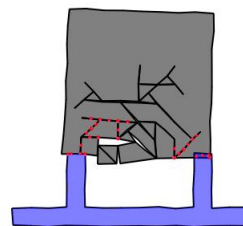
Simple 4 (toughness = 2000)

```
particles = 53
time = 3.990
<comments>
h = 0.01
substeps = 1
```

Simple 5 (toughness = 100)

```
particles = 257
time = 2.240
<comments>
h = 0.02
substeps = 1
```

For MySimple, toughness = 40 and please also refer to the short demo video.

```
particles = 150
time = 1.620
<comments>
h = 0.01
substeps = 1
```