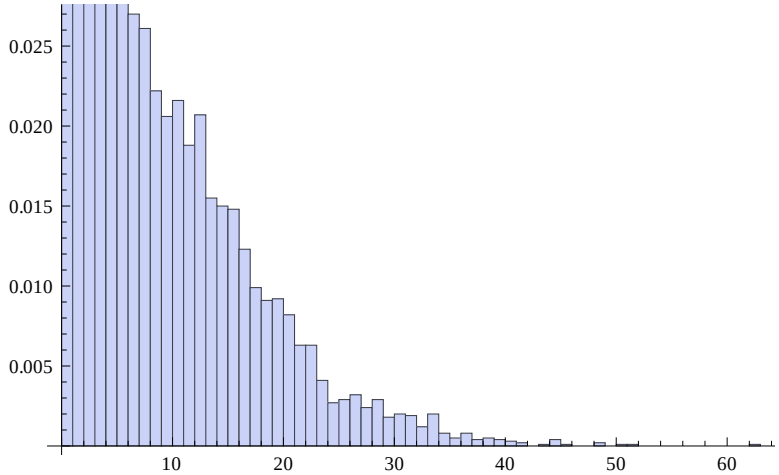
```
P0 = 100; M = 100; σ = 0.4; r = 0.04; T = 1 / 12;
n = 10 000; dt = T / n;

Timing[
 W = RandomReal[NormalDistribution[], {n}] * Sqrt[T];
 PE = 0; PV = 0; p = {};
 For[i = 1, i < n + 1, i++,
  P = Exp[T (r - σ^2 / 2) + σ W[[i]]];

  (*

  P2=Which[P≥1.5,16,P≥1.4,8,P≥1.3,4,P≥1.2,2,P≥1.2,1,P<1.2,0]0.8;
  P2=Which[P≥1.3,20,P<1.3,0];
  P2=Which[P≥1.5,16,P≥1.4,8,P≥1.3,4,P≥1.2,2,P≥1.1,1,P≥1,0.5,P<1,0];
  P2=Which[P≥1.5,16,P≥1.4,8,P≥1.3,4,P≥1.2,2,P≥1.1,1,P≥1,0.5,P≥0.9,0.1,P<0.9,0]/5;
  *)
  P2 = Max[P - 1, 0] * 100;
  AppendTo[p, P2];
  PE += P2;
  PV += P2^2;
 ];

 {"Mean:", Exp[-r T] PE / n, "StD of Mean:",
  Sqrt[Exp[-2 r T] / n / (n - 1) (PV - PE^2 / n)]}
]
```

```
{0.39, {Mean:, 4.77754, StD of Mean:, 0.0735602}}
```

oder eben 1 € pro 10 % rednite!!!
stellt dir diesne werbe slogan vor.
Börsenspiel - 1 € echten Euro für 10 % Rendite
ja ist nice
aber der anfang wird hart

Also für 50 cent gibt es diese auszahlunge (in €€€!)

```
Histogram[p , Automatic, "ProbabilityDensity"]
```




```
Tally[p] // N
```

```
{{0., 9471.}, {1.6, 426.}, {6.4, 14.}, {3.2, 85.}, {12.8, 4.}}
```