```
Exit[]

DSolve[f'[x] - r * f[x] - c == 0, f[x], x]
```

$$\left\{\left\{f[x] \rightarrow -\frac{c}{r} + e^{r\,x}\,C[1]\right\}\right\}$$

```
n = 2000; dW = RandomReal[NormalDistribution[], {n}] / Sqrt[n];
W = Join[{0}, Table[Sum[dW[[i]], {i, 1, t}], {t, 1, n-1}]];

n = 2000; dW = RandomReal[NormalDistribution[], {n}] / Sqrt[n];
W = Join[{0}, Table[Sum[dW[[i]], {i, 1, t}], {t, 1, n-1}]];
IWdW = Table[Sum[W[[i]] * dW[[i]], {i, 1, t}] + t / 2 / n, {t, 1, n}];
ListPlot[{W ^ 2 / 2, IWdW}]
```
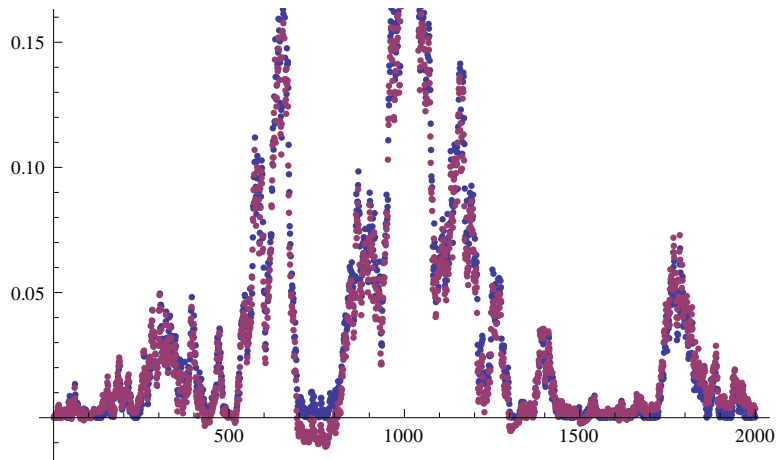

Stop-Loss Start-Gain
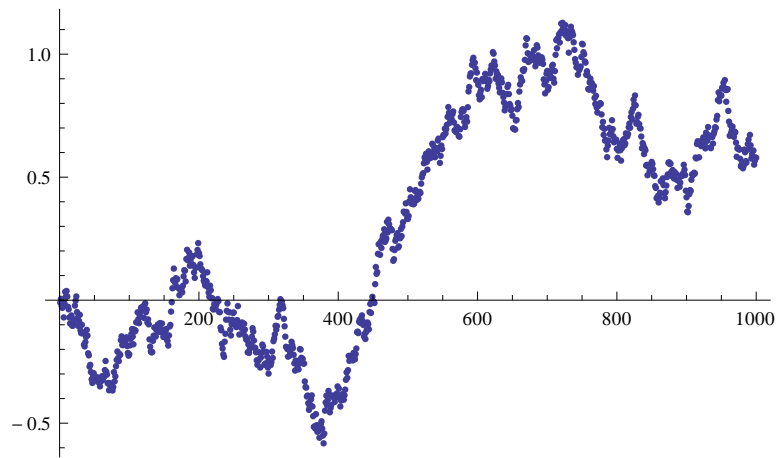
```
U = {};

n = 500 000; dW = RandomReal[NormalDistribution[], {n}] / Sqrt[n];
W = Accumulate[dW]; ListPlot[Table[W[[i * 500]], {i, 1, n / 500}]]
```
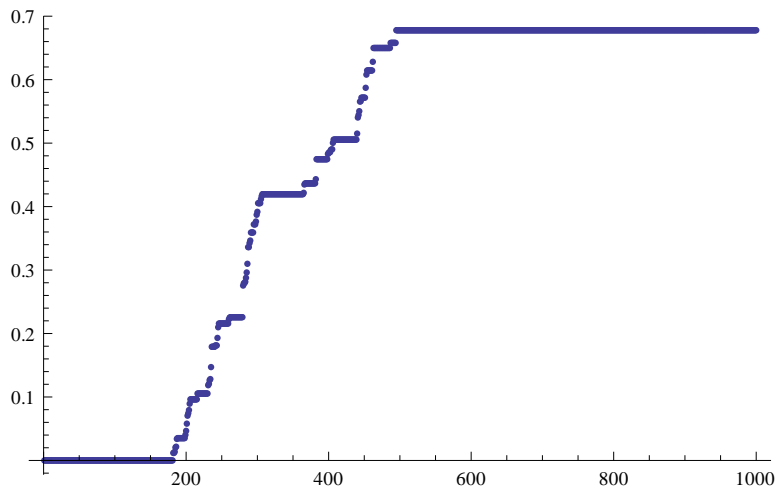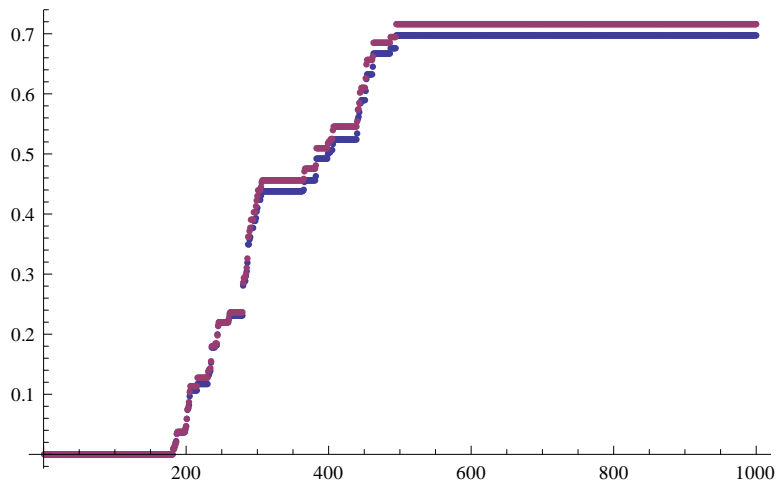
```
a = 0.001;
IfsdW = Accumulate[dW * fs[W, a]];
IThetadW = Accumulate[dW * HeavisideTheta[W - 0.2]];
L = Accumulate[fss[W, a]] / n;
```

```
ListPlot[{str[IThetadW] - (Max[0, # - 0.2] & /@ str[W])}]
```



```
ListPlot[{str[IfsdW] - f[str[W], a], str[L] / 2}]
```

```
fss[ft_, a_] := (HeavisideTheta[ft - 0.2 + a] - HeavisideTheta[ft - 0.2 - a]) / 2 / a;
              1
f[x_, b_] := ─ HeavisideTheta[x]
              b
   ((-0.010000000000000002` - 0.25` b (0.4`+ b) + 0.1` x + 0.5` b x - 0.25` x²)
      HeavisideTheta[-0.2` - b + x] + (0.010000000000000002`+ 0.25` (-0.4`+ b) b -
        0.1` x + 0.5` b x + 0.25` x²) HeavisideTheta[-0.2`+ b + x]);
              1
fs[x_, b_] := ─ HeavisideTheta[x] (-0.5` (-0.2`- 1.` b + x) HeavisideTheta[-0.2`- b + x] +
              b
     0.5` (-0.2`+ b + x) HeavisideTheta[-0.2`+ b + x])

 str[x_] := Table[x[[i * n / 1000]], {i, 1, 1000}]

 +
```