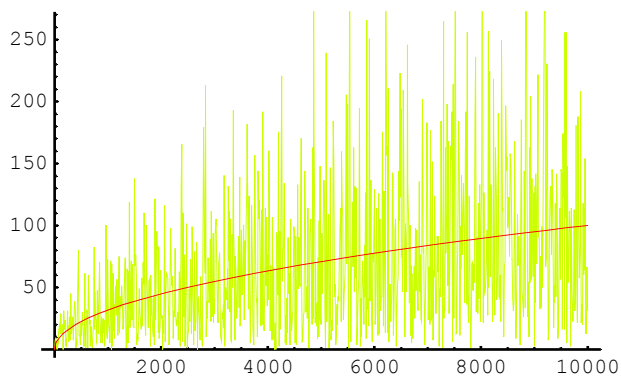


```
sRandom := 2 * (Random[Integer] - 1 / 2)
```

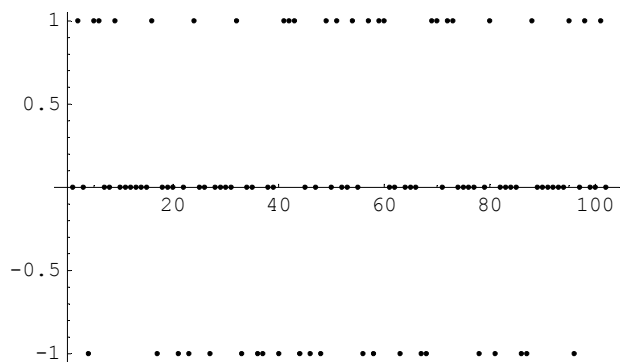
```
Plot[
  {Abs[Sqrt[Pi / 2] Sum[sRandom, {i, n}]],
   Sqrt[n]},
  {n, 0, 10000},
  PlotStyle -> {{Hue[0.2]}, {Hue[1.0]}}
```

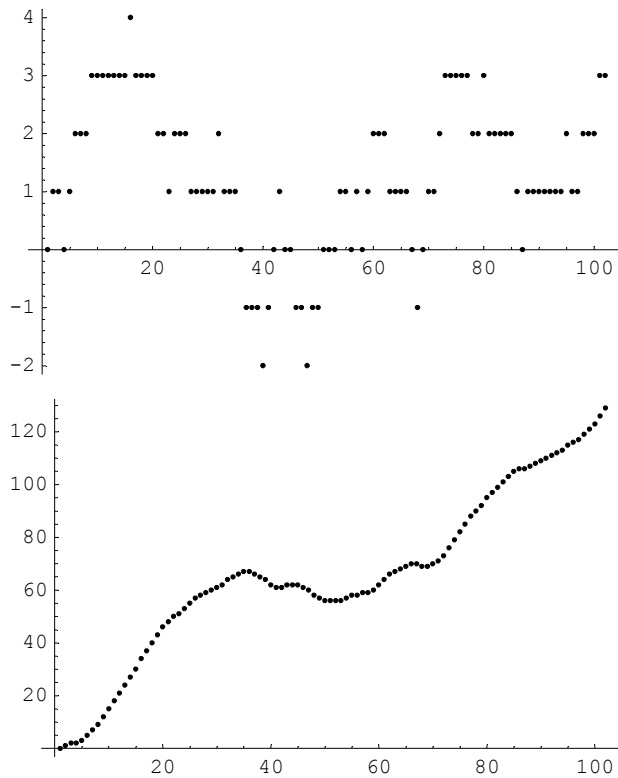


- Graphics -

```
aRandom := If[(r = Random[]) < 0.5, 0, If[r < 0.75, -1, 1]]
```

```
n = 0;
a = {0};
v = {0};
x = {0};
While[n ≤ 100,
  a = Append[a, aRandom];
  v = Append[v, Last[v] + Last[a]];
  x = Append[x, Last[x] + Last[v]];
  ++n];
ListPlot[a];
ListPlot[v]; ListPlot[x];
```





```

i = 1;
While[i <= 100,
  n = 1;
  a = {aRandom};
  v = {0};
  x = {0};
  While[n <= 1000,
    a = Append[a, aRandom];
    v = Append[v, Last[v] + Last[a]];
    x = Append[x, Last[x] + Last[v]];
    ++n]; (* end of While[n ...] *)
  If[i == 1,
    aa = a^2; vv = v^2; xx = x^2,
    aa += a^2; vv += v^2; xx += x^2];
  ++i]; (* end of While[i ...] *)
ListPlot[Sqrt[aa / (i - 1)]];
ListPlot[Sqrt[vv / (i - 1)]];
ListPlot[Sqrt[xx / (i - 1)]];

```

