```
(* Set directory to current one *)
SetDirectory[NotebookDirectory[] <> "/gauss-legendre"]

symboliclegendre[n_, x_] := Solve[LegendreP[n, x] == 0];
legendreprime[n_, a_] := D[LegendreP[n, x], x] /. x → a;
weights[n_, x_] := 2 / ((1 - x^2) legendreprime[n, x]^2);

(*how many terms should be generated*)
m = 128;

(*what numerical precision is desired?*)
precision = 32;

For[n = 1, n ≤ m, n++,
     nlist := symboliclegendre[n, x];
     xnlist = x /. nlist;
     slist := symboliclegendre[n, x];
     xslist = x /. slist;
     file = OpenWrite["gauss-legendre" <> ToString[n] <> ".txt"];
     Write[file, n];
     Write[file, 2];
     For[k = 1,  k ≤ n, k++,
       xs = ToString[ToString[#, FortranForm] & /@ N[xnlist[[k]], precision]] ×
       ws =
      ToString[ToString[#, FortranForm] & /@ N[weights[n, xslist[[k]]], precision]] ×
       WriteString[file, xs, " ", ws, "\n"];
       ] ×
  Close[file];
  ]
```

In[ ]:=
```
(* Set directory to current one *)
SetDirectory[NotebookDirectory[] <> "/gauss-hermite"]
W[n_, x_] := (2^(n - 1) * (n!) * Sqrt[π]) / (n HermiteH[n - 1, x])^2;
(*how many terms should be generated*)
m = 128;

(*what numerical precision is desired?*)
precision = 32;

For[n = 1, n ≤ m, n++,
     X = x /. Solve[HermiteH[n, x] == 0];
     file = OpenWrite["gauss-hermite" <> ToString[n] <> ".txt"];
     Write[file, n];
     Write[file, 2];
     For[k = 1, k ≤ n, k++,
       WriteString[file,
         FortranForm@N[X[[k]], precision],
         " ",
         FortranForm@N[W[n, X[[k]]], precision],
         "\n"
         ];
       ]
  Close[file];
  ]
```