```
(%i1) /* [wxMaxima batch file version 1] [ DO NOT EDIT BY HAND! ]*/
                                                                                                                             /* [ Created with wxMaxima version 14.12.1 ] */
                                                                                                                             /* [wxMaxima: input start ] */
                                                                                                                          N:20;
  (\%01) 20
       (\%i2) x[0]:1;
                                                                                                                          x[1]:2;
                                                                                                                          for n:0 thru N do (
                                                                                                                                                                                              x[n + 2]: 1/2*(x[n] + x[n+1])
                                                                                                                             );
  (\%o2) 1
     (\%o3) 2
  (\%o4) done
       (%i5) for n:0 thru N do (
                                                                                                                                                                                                display( float(x[n]) )
float (1) = 1.0 float (2) = 2.0 float \left(\frac{3}{2}\right) = 1.5 float \left(\frac{7}{4}\right) = 1.75 float \left(\frac{13}{8}\right) =
1.625 float\left(\frac{27}{16}\right) = 1.6875 float\left(\frac{53}{32}\right) = 1.65625 float\left(\frac{107}{64}\right) = 1.671875 float\left(\frac{213}{128}\right) = 1.625 float\left(\frac{27}{16}\right) = 1.6875 float\left(\frac{213}{128}\right) = 1.625 float\left(\frac{27}{16}\right) = 1.6875 float\left(\frac{213}{128}\right) = 1.6875 float\left
1.6640625 float \left(\frac{427}{256}\right) = 1.66796875 float \left(\frac{853}{512}\right) = 1.666015625 float \left(\frac{1707}{1024}\right) = 1.6640625 float \left(\frac{427}{256}\right) = 1.66796875 float \left(\frac{853}{512}\right) = 1.666015625 float \left(\frac{1707}{1024}\right) = 1.6660
1.6669921875 float \left(\frac{3413}{2048}\right) = 1.66650390625 float \left(\frac{6827}{4096}\right) = 1.666748046875 float \left(\frac{13653}{8192}\right) = 1.6667480486875 float \left(\frac{13653}{8192}\right) = 1.666748075 float \left(
1.6666259765625 float \left(\frac{27307}{16384}\right) = 1.66668701171875 float \left(\frac{54613}{32768}\right) = 1.666656494140625 float \left(\frac{109227}{65536}\right) = 1.6666259765625 float \left(\frac{27307}{16384}\right) = 1.66668701171875 float \left(\frac{54613}{32768}\right) = 1.666656494140625 float \left(\frac{109227}{65536}\right) = 1.66668701171875 float \left(\frac{54613}{32768}\right) = 1.666656494140625 float \left(\frac{109227}{65536}\right) = 1.66668701171875 float \left(\frac{54613}{32768}\right) = 1.666656494140625 float \left(\frac{109227}{65536}\right) = 1.66666701171875 float \left(\frac{54613}{32768}\right) = 1.66666701171875 float \left(\frac{54613}{32768}\right) = 1.66666701171875 float \left(\frac{54613}{32768}\right) = 1.66666701171875 float \left(\frac{54613}{32768}\right) = 1.66666701171875 float \left(\frac{54613}{65536}\right) = 1.6666701171875 float \left(\frac{54613}{6556}\right) = 1.666670
  1.666671752929688 float\left(\frac{218453}{131072}\right) = 1.666664123535156 float\left(\frac{436907}{262144}\right) = 1.666667938232422 float\left(\frac{8738138}{524288}\right) = 1.666667938232422 float\left(\frac{873813}{524288}\right) = 1.66666793823242 float\left(\frac{873813}{524288}\right) = 1.666667938232 float\left(\frac{873813}{524288}\right) = 1.66666793823242 float\left(\frac{873813}{52428}\right) = 1.66666793823242 float\left(\frac{873813}{52428}\right) = 1.66666793823242 float\left(\frac{873813}{52428}\right) = 1.66666793823242 float\left(\frac{873813}{52428}\right) = 1.66666793823242 float\left(\frac{873813}{524288}\right) = 1.66666793823242 float\left(\frac{873813}{524288}\right) = 1.66666793823242 float\left(\frac{873813}{524288}\right) = 1.66666793823242 float\left(\frac{873813}{52428}\right) = 1.66666793823242 float\left(\frac{873813}{52428}\right) = 1.66666793823242 float\left(\frac{873813}{524288}\right) = 1.66666793823242 float\left(\frac{873813}{524288}\right) = 1.66666793823242 float\left(\frac{873813}{524288}\right) = 1.666667938242 float\left(\frac{873813}{52428}\right) = 1.666666793825 float\left(\frac{873813}{52428}\right) = 1.6666679382 float\left(\frac{873813}{52428}\right) = 1.6666679382 fl
  1.666666030883789
  (\%05) done
```