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(*Problem:  $x''[t] + w^2 x[t] = 0$ ,  
using Laplace Transform. The initial conditions are  $x[0]=1, x'[0]=0$ *)
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deq = x''[t] + w^2 * x[t] == 0;  
initial = {x[0] → 1, x'[0] → 0};  
aeq = LaplaceTransform[deq, t, s] /. initial  
fs = Solve[aeq, LaplaceTransform[x[t], t, s]]  
  
fs = LaplaceTransform[x[t], t, s] /. fs[[1]] /. w → 1  
  
xt = InverseLaplaceTransform[fs, s, t]
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Plot[xt, {t, 0, 10}]
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? LaplaceTransform
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LaplaceTransform[*expr*, *t*, *s*] gives the Laplace transform of *expr*.
LaplaceTransform[*expr*, {*t*₁, *t*₂, ...}, {*s*₁, *s*₂, ...}] gives the multidimensional Laplace transform of *expr*. >>

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? For
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For[*start*, *test*, *incr*, *body*] executes *start*, then repeatedly evaluates *body* and *incr* until *test* fails to give True. >>